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### ABSTRACT

This document provides information and guidance on wildfire prevention strategies. Chapters include: (1) "Introduction"; (2) "How to Use this Guide"; (3) "Fire Cause Classification"; (4) "Relative Effectiveness"; (5) "Degree of Difficulty"; (6) "Intervention Techniques"; (7) "Prevention Activities"; (8) "Sample Prevention Strategies"; and (9) "Prevention Program Evaluation". (YDS)



# A Publication of the **National Wildfire Coordinating Group**

Sponsored by **United States** Department of Agriculture

**United States** Department of the Interior

National Association of State Foresters

# Wildfire Prevention **Strategies**



**March 1998 PMS 455** NFES 1572 Фб U.S. DEPARTMENT OF EDUCATION
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EDUCATIONAL RESOURCES INFORMATION

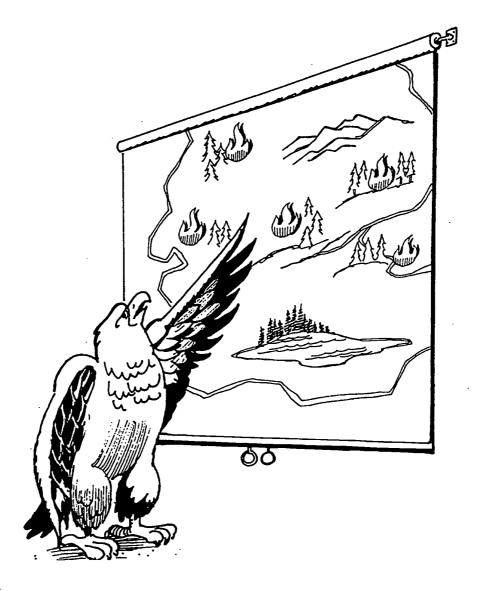
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# Wildfire Prevention Strategies





# Preface

This Wildfire Prevention Guide is a project of the National Wildfire Coordinating Group. This is one in a series designed to provide information and guidance for personnel who have interests and/or responsibilities in fire prevention.

Each guide in the series addresses an individual component of a fire prevention program. In addition to providing insight and useful information, each guide suggests implementation strategies and examples for utilizing this information.

Each Wildfire Prevention Guide has been developed by Fire Prevention Specialists and subject matter experts in the appropriate area. The goal of this series is to improve and enhance wildfire prevention programs and to facilitate the achievement of NWCG program goals.

NWCG Wildfire Prevention Guide development:

- Conducting School Programs (1996)
- Event Management (1996)
- Wildfire Prevention Marketing (1996)
- Wildfire Prevention and the Media (1998)
- Wildfire Prevention Strategies
- Effective Wildfire Prevention Patrol
- Recreation Areas
- Exhibits and Displays
- Equipment, Industrial and Construction Operations
- Show Me Trips and Tours

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Introduction 1.0

The rules are changing in the wildland fire game! Build ups of natural fuel beds and flash fuels have made today's wildland fires harder to control, expensive to suppress and a threat to the lives of firefighters and civilians. Potential wildland fire consequences now involve more than blackened acres and property loss. When today's wildland fires escape they burn with intense heat and erratic fire behavior, severely impacting and even altering ecosystems and communities and challenging their ability to recover.

Past suppression tactics and actions have been highly effective, controlling an annual average 97-98% of wildland fires in the first burning period. During the 1994 U.S. fire season, wildland suppression forces extinguished 97½% of fires during the first burning period. The 2½% that escaped became major fires with disastrous consequences. The cost of 97½% effectiveness in 1994, unfortunately was the lives of 34 dedicated line and support firefighters and approximately \$1 billion in suppression costs to federal and state agencies (not including costs of natural resource and property damages and rehabilitation). The trend seems to be that while winning 97% or more of wildland fire battles, we are losing the war to large suppression costs, extensive damage to natural, cultural and personal resources, and excessive risk to the lives of our firefighters and publics.

The time has come to play differently if we want to continue to stay in the game. No longer can we afford to invest all our stakes in fire suppression forces, equipment and strategies. "Reactive" fire suppression programs must evolve into "proactive" fire management programs that effectively apply fire prevention and hazardous fuels reduction techniques to not only reduce unwanted fire ignitions, but also minimize damages and personnel exposure from escaped fires.

We can get back in the game by learning how to use an old tool better, Fire Prevention! Recent information can show us the best fire prevention techniques to use in specific situations to more effectively reduce the

WILDFIRE PREVENTION STRATEGIES

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damages and risks from unwanted wildland fires. For instance, this information shows how (1) recreational campfire ignitions can be reduced by nearly 80% through the implementation of patrols, user contacts and signing, (2) equipment and children caused ignitions can "easily" be reduced by 47% or more, and (3) about 50% of miscellaneously caused wildland fires (of which we are not even certain of the cause) can be reduced.

It is time to invest in "proactive" prevention methods that fight wildland fires before they start and are proven to reduce damages, losses and the threat to human life. By focusing prevention strategies and resources (fire and non-fire) and implementing integrated fire prevention programs we can now more effectively reduce wildland fire ignitions, reduce the damage to resources by unwanted wildland fires and reduce the threat to public safety.

This may mean doing old things differently, doing new things, aiming at different targets or getting "out of the rut" and working outside the comfort zone for a while. It will mean asking WHY you are doing the prevention things you're doing now, evaluating HOW they are working, determining WHAT things will affect your priority wildland fire problems and deciding WHEN they should be done. It may mean doing fewer school programs and more adult education. It may mean doing more high visibility patrolling with fire personnel. It may mean giving prevention training to non-fire personnel. It will mean better results for most prevention programs.

Use the information in this guide to assist your land manager, fire manager and prevention specialist to design and implement the most effective "proactive" program to mitigate suppression costs and losses from unwanted wildland fires.

10 - Introduction



# How To Use This Guide

2.0

# **BEFORE YOU START**

Prior to using this guide to develop a unit wildland fire prevention plan, it is recommended that an assessment of risks (ignition potential), hazards (fuel loading and topography), values (potential losses from fire) and historical fire occurrence (fire causes) be completed for the unit. This will define the priority fire prevention problem(s) and their location(s). Using accurate fire cause and location information obtained from a fire prevention assessment and then applying the process outlined in this **Wildland Prevention**Strategies Guide will facilitate development of a unit fire prevention plan that most effectively and efficiently reduces costs and losses from unwanted wildland fires. (Note: P-101 Introduction to Wildfire Prevention and P-301 Wildland Fire Prevention Planning will assist you with this effort.)

# **GETTING STARTED**

Once the unit's priority fire causes (refer to <u>Fire Causes 3.0</u>) and locations of highest potential loss by wildland fire have been determined, the <u>Relative Effectiveness 4.0</u> and <u>Degree of Difficulty 5.0</u> tables can be used to determine the focus of the prevention activities and the degree of success that the prevention program can be expected to achieve.

# **APPLYING RELATIVE EFFECTIVENESS**

The <u>Relative Effectiveness 4.0</u> table is used to determine which types of fire prevention activities will be the most successful in mitigating individual fire cause problems. If a unit's priority fire cause is debris burning (fire use), the <u>Relative Effectiveness</u> table indicates that the most effective prevention plan will include (1) educational programs aimed at the debris burning target group, (2) public contact with individuals in the target group, (3) inspections of specific locations where the problem exists and (4) enforcement of regulations that limit fire use during periods of high fire danger.

WILDFIRE PREVENTION STRATEGIES

How To Use This Guide - 11



# WHAT'S "DEGREE OF DIFFICULTY"?

The <u>Degree of Difficulty 5.0</u> table is used to determine how difficult particular fire cause problems will be to mitigate. For example, the <u>Degree of Difficulty</u> table indicates that the debris burning cause will respond well to the proper fire prevention activities. It can be expected that a fire prevention program containing the appropriate fire prevention activities and strategies will reduce these ignitions by 46-74% (where 74% is obtained by adding 46 [Easy] and 28 [Moderately Difficult] degrees of difficulty in the Fire Use row of the table).

In comparison, this chart also shows that Incendiary fires are less responsive to prevention strategies as easy to moderately difficult mitigation of these fires can be expected to be only 14-28% successful. This indicates that reducing more than 28% of these ignitions can be accomplished but will involve more complex and most likely more expensive fire prevention efforts.

# WHAT WILL WORK THE BEST?

The Intervention Techniques 6.0 section can now be used to identify those specific prevention activities most effective upon the priority fire cause(s). In the case of debris burning (fire use) mitigation the Relative Effectiveness 4.0 table showed that education activities (targeting specific audiences and making public contacts) and enforcement activities (site inspections) would be highly effective in reducing this fire cause. The Intervention Techniques 6.0 section now helps define the specific elements of the education and enforcement fire prevention components that should be considered. This section indicates the effectiveness level of specific prevention activities by individual fire cause. This allows users to start building an effective fire prevention program by determining and selecting the most effective fire prevention activities for each priority fire cause.

12 - How To Use This Guide



# **BUILDING STRATEGIES**

The <u>Prevention Activities 7.0</u> section provides the fire manager a comprehensive listing of fire prevention activities grouped within the operational prevention components of Education, Engineering, Enforcement and Administration. The prevention activities are grouped within these categories by their implementation method or target audience.

This list is provided to assist with the selection of fire prevention activities that most effectively mitigate specific fire cause problems. The combination of these selected prevention activities targeted at a specific fire cause become fire prevention "strategies."

While selecting the appropriate prevention activities and building the fire prevention program strategies, it is time to determine how these activities and strategies can most effectively be applied. To do this, determine which prevention activities should be applied over the entire unit to increase the awareness of a large audience of a specific fire cause problem (General Actions), such as a mass media campaign on current fire conditions. Also determine which prevention activities can be more effectively targeted at specific locations and/or target groups to focus the fire prevention effect and achieve more definitive results (Specific Actions) such as public contacts and inspections in an area of numerous debris burning ignitions.

The most effective prevention programs have the proper mix of General Actions which develop awareness among a large audience and Specific Actions which effectively target priority fire causes in specific locations.

# SAMPLES STRATEGIES TO CONSIDER

The <u>Sample Prevention Strategies 8.0</u> section groups fire prevention activities in Section 7.0 into prevention program strategies that target the individual fire causes listed in Section 3.0.

The sample strategies in this section are intended as *examples only!*Remember that each fire prevention situation has unique twists and traits.
Effective prevention activities and strategies will vary from area to area and

WILDFIRE PREVENTION STRATEGIES

How To Use This Guide - 13



even from time to time within the same area. What works well for reducing equipment caused fires in one area may not be effective "next door." What worked well five years ago to reduce recreational fires may not do the same job with a younger audience today!

Use these sample strategies to get started if this guide indicates they will improve your fire prevention situation but change the mix to meet your individual program needs.

# IS IT WORKING?

Time changes everything and sometimes even the best laid plans don't do what we expect. That's why it is important to review the cause and effect relationship of your prevention program once in a while.

The <u>Prevention Program Evaluation 9.0</u> section provides some basic recommendations on how and when to evaluate the effectiveness of a fire prevention program. Use it to develop your own reviews of how things are going, what will improve the situation and to keep your program up-to-date.

14 - How To Use This Guide



# Fire Cause Classifications

3.0

Agencies all have individual methods of keeping fire cause information. The following section defines one approach and should not be considered as the only method.

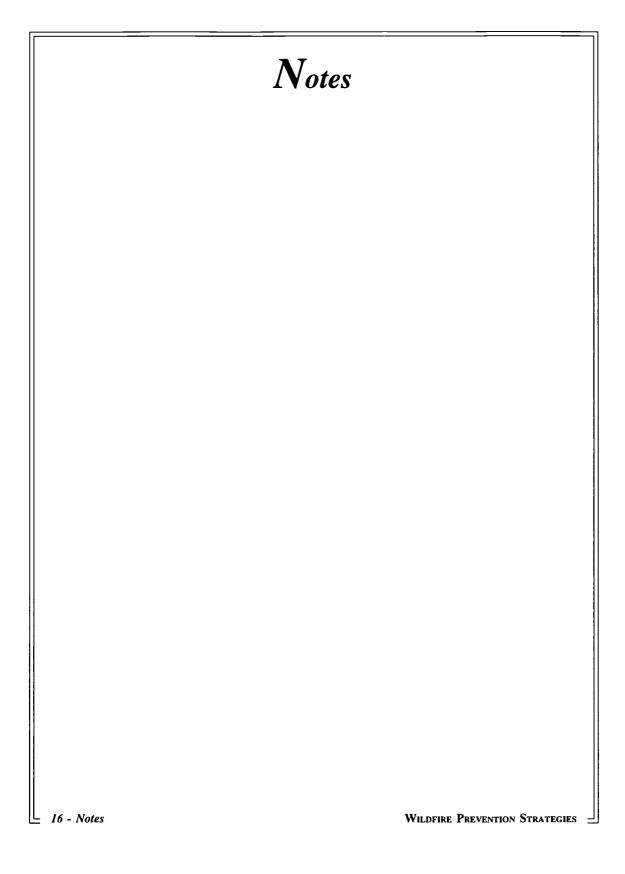
The best fire reporting systems provide a simple method of data compilation with efficient retrieval capability. This provides the fire prevention planner with accurate and accessible fire cause data. Good fire cause data includes ignition cause, location, day/time and a measure of fire severity (example: size of fire, loss or damages, etc.).

Using accurate fire cause information allows a fire prevention planner to more effectively target specific ignition patterns by selecting and applying the most effective prevention strategies in the proper locations at the required times.

WILDFIRE PREVENTION STRATEGIES

Fire Cause Classifications - 15







# Fire Cause Classifications

*3.0* 

Fire Cause	Related Cause	Fire	Cause	Related Cause
(01) Natural	Lightning	(06)	Equipment	Vehicle
	Volcanic			Exhaust
	Other-Known			Brakes
	Other-Unknown			Blasting
				Power Line
(02) Campfire	Cooking/Warming			Other-Known
	Other-Known			Other-Unknown
	Other-Unknown			
		(07)	Railroad	Exhaust
(03) Smoking	Smoking Activities			Brakes
•	-	1		Other-Known
(04) Fire Use	Trash Burning			Other-Unknown
	Burning Dump			
	Field Burning	(08)	Juveniles	Recurrent
	Land Clearing			Fireworks
	Slash Burning			Ignition Devices
	Right-of-Way Burning			Other-Known
	Resource Mgmt Burning			Other-Unknown
	Other-Known		•	
	Other-Unknown	(09)	Miscellaneous	Aircraft
				Burning Building
(05) Incendiary	Grudge Fire			Fireworks-Adult
•	Recurrent	ŀ		Other-Known
	Employment	ŀ		Other-Unknown
	Other-Known			
	Other-Unknown			

WILDFIRE PREVENTION STRATEGIES

Fire Cause Classifications - 17



# Relative Effectiveness

activities. The following table shows the results of the survey. The table indicates the relative effectiveness of A nationwide survey (1995) was conducted to determine the relative effectiveness of fire prevention prevention activities when applied to a specific fire cause. WILDFIRE PREVENTION STRATEGIES

Fire prevention activity highly effective 11 H M J

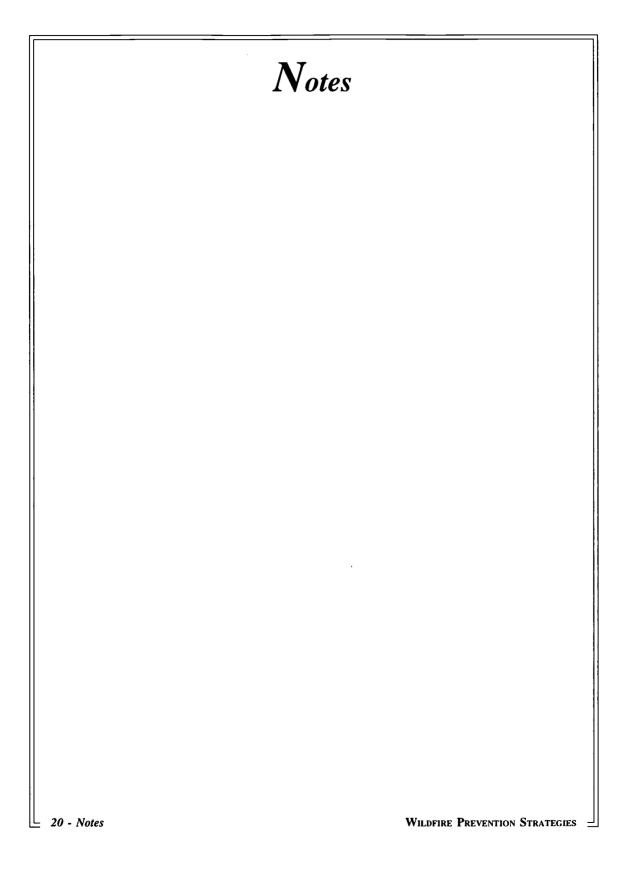
Fire prevention activity moderately effective 11

Fire prevention activity less effective - 11

			Fire	Equipment				
	Campfire	Children	Use	Use	Incendiary	Misc	Railroad	Smoking
Education - Target Specific	Н	Н	H	M	M	M	M	M
Education - General	M	M	M	M	Т	M	Г	M
Patrol	H	M	M	M	M	M	M	M
Public Contact-Individual	H	Н	Н	Н	M	M	M	M
Public Contact - Groups	Н	H	M	M	M	M	M	M
Signs	M	M	M	M	Т	M	Т	M
Inspections - Dispersed	M	M	M	M	Т	M	M	M
Inspections - Site Specific	Н	Т	H	H	Г	M	H	Г
Engineering	M	Т	M	M	Г	M	M	Г
Enforcement	Н	W	H	. Н	M	M	M	M
Administration	M	M	M	M	1	Т	M	Г

Relative Effectiveness - 19







5.0

# Degree of Difficulty

The nationwide study indicated the degree of difficulty in preventing fires by specific cause. The table indicates the percent of fires by cause which are easy, moderate or difficult to prevent.

Wildfire easy to prevent (readily susceptible to fire prevention activities) II

Moderate = Moderately difficult to prevent

Hard to prevent (considerable effort is required to affect fire occurrence or fires are unpreventable) П Difficult

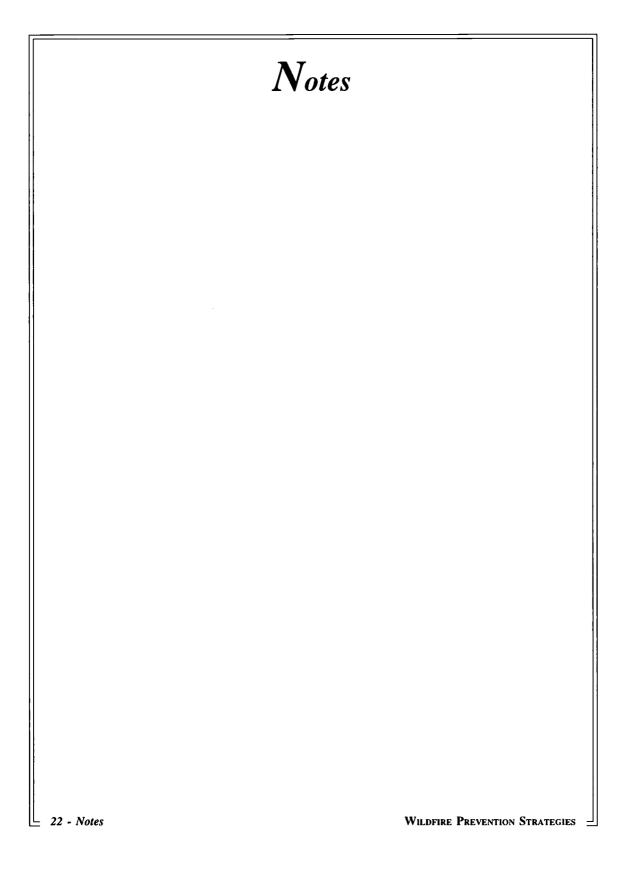
	Easy	Moderate	Difficult
Equipment Use	47%	26%	27%
Smoking	37%	28%	35%
Campfire	53%	26%	21%
Fire Use	46%	28%	26%
Railroad	41%	22%	37%
Incendiary	14%	14%	72%
Children	47%	26%	27%
Miscellaneous	28%	23%	%67

WILDFIRE PREVENTION STRATEGIES

Easy

Degree of Difficulty - 21







# Intervention Techniques

6.0

The following Intervention Techniques provide an effectiveness evaluation of fire prevention activities as they relate to specific fire causes. The fire prevention activities are grouped within the components of:

- Education
- Engineering
- Enforcement
- Administration

Each fire prevention component lists prevention activities. A determination is made as to the effectiveness of each activity.

The effectiveness level of the activities increases as the numbers increase from 1 to 10:

1 = Not Applicable

2-4 = Awareness

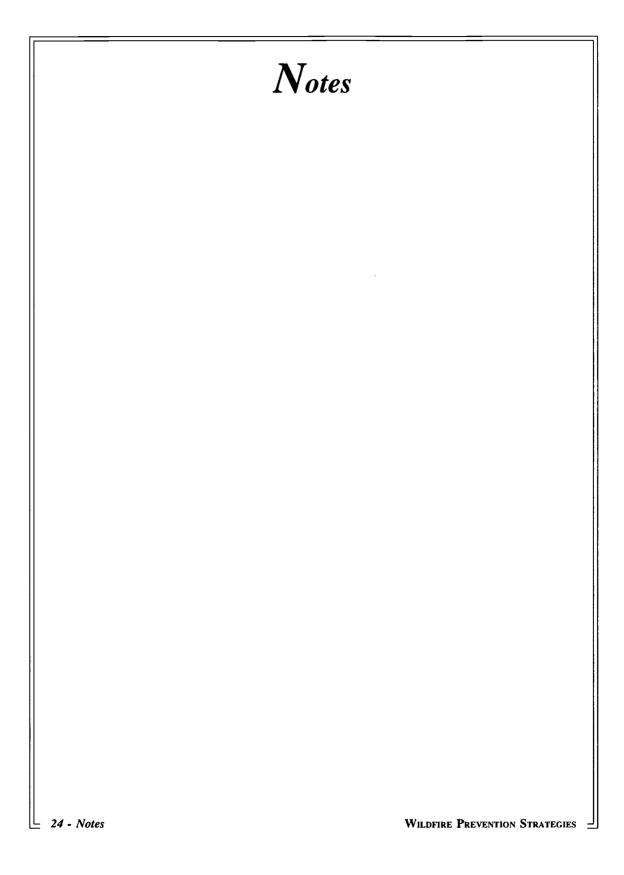
5-8 = Effective

9-10 = Highly Effective

WILDFIRE PREVENTION STRATEGIES

Intervention Techniques - 23







# Natural Fire Intervention Techniques

6.1

Although wildfire prevention activities do not normally reduce the number of natural ignitions, education, engineering and administrative prevention strategies are effective in mitigating losses in areas with a history of natural caused ignitions.

Take for instance an area of forested hills (high hazard fuels) containing summer homes (high value resources) and experiencing severe summer thunderstorms (high risk of lightning ignitions).

An effective fire prevention program can be designed to reduce damage and losses when a lightning fire occurs in this situation. Property owners can be educated on how to reduce hazardous fuels on their property and how to build with fire safe construction materials.

Adjacent property managers can employ prevention engineering methods to reduce the threat of fires moving to privately owned property by treating hazardous fuels.

WILDFIRE PREVENTION STRATEGIES

Intervention Techniques - 25



### NATURAL FIRE Prevention Intervention 6.1 01 Related Causes: Lightning, Volcanic, Other-Known/Unknown COMPONENT: **EDUCATION** Effectiveness Level 2 3 4 5 8 10 Fire Safety Material Fire Safety Programs-Homeowners Planning Commissions, etc. Specific Campaign Development Train Volunteer Fire Departments Utilize Volunteers Urban Interface Neighborhood Programs Mass Media-Radio Mass Media-Written Mass Media-Television Mass Media-General Interagency Campaigns-CFFP, Characters Fire Information Children's Programs-Specific Signing Public Education-General Printed Material-Other High Visibility Patrol-Public Contact High Visibility Fire Prevention-Militia, Visitor Centers, etc. School Programs Sports o Parades Fairs Exhibits/Displays Internal Communication Bilingual Programs 26 - Natural Fire Prevention Intervention WILDFIRE PREVENTION STRATEGIES



### NATURAL FIRE Prevention Intervention 6.1 = Not Applicable 2-4 = Public Awareness 5-8 = Effective 9-10 = Highly Effective COMPONENT: **ENGINEERING** Effectiveness Level 6 7 2 3 5 8 9 10 1 Establish Construction Activity Fire Criteria Notify Utilities of Fire Precautions Scot Check Utilities Inspection of Utilities, Power Lines, Railroads, etc. Campfire Safety Hazard Reduction (Incl. Prescribed Fire) Residential Evaluations/Inspections Land Use Development COMPONENT: **ENFORCEMENT** Fire Investigation Restricted Use Enforcement Codes/Ordinances Fire Precaution Regulations Spark Arresters Permits Inspections COMPONENT: ADMINISTRATION Early Warning Corporate Involvement Training Cooperative Fire Prevention Planning WILDFIRE PREVENTION STRATEGIES Natural Fire Prevention Intervention - 27



# CAMPFIRE Prevention Intervention

6.2

Related Causes: Cooking/Warming Fire, Other-Known/Unknown 02 Campfire related ignitions can be reduced through effective application of education, engineering, and enforcement activities.

COMPONENT: EDUCATION										
				Effe	ctiv	eness	Leve	el.		
	1	2	3	4	5	6	7	8	9	10
Fire Safety Material										
Fire Safety Programs-Homeowners										
Planning Commissions, etc.										
Specific Campaign Development										
Train Volunteer Fire Departments										
Utilize Volunteers										
Urban Interface										
Neighborhood Programs										
Mass Media-Radio										
Mass Media-Written										
Mass Media-Television										
Mass Media-General										
<ul> <li>Interagency Campaigns-</li> </ul>										
CFFP, Characters										
Fire Information										
• Children's Programs-Specific										
• Signing										
Public Education-General										
Printed Material-Other										
High Visibility Patrol-Public Contact										
<ul> <li>High Visibility Fire Prevention-</li> </ul>										
Militia, Visitor Centers, etc.										
• School Programs										
• Sports										
• Parades										
• Fairs										
Exhibits/Displays										
Internal Communication										
Bilingual Programs										



28 - Campfire Prevention Intervention

### CAMPFIRE Prevention Intervention 6.2 2-4 = Public Awareness = Not Applicable 5-8 = Effective 9-10 = Highly Effective COMPONENT: ENGINEERING Effectiveness Level 7 3 8 10 Establish Construction Activity Fire Criteria Notify Utilities of Fire Precautions Spot Check Utilities Inspection of Utilities, Power Lines, Railroads, etc. Campfire Safety • Hazard Reduction (Incl. Prescribed Fire) Residential Evaluations/Inspections Land Use Development COMPONENT: ENFORCEMENT Fire Investigation Restricted Use Enforcement Codes/Ordinances Fire Precaution Regulations Spark Arresters Permits Inspections COMPONENT: ADMINISTRATION Early Warning Corporate Involvement Training Cooperative Fire Prevention Planning WILDFIRE PREVENTION STRATEGIES Campfire Prevention Intervention - 29



# SMOKING Prevention Intervention

6.3

Related Causes: Smoking Activities 03
Smoking related ignitions can be reduced through effective application of education and enforcement strategies.

COMPONENT: EDUCATION

				Eff∈	ctiv	eness	Leve	al .		
Fire Safety Material	1	2	3	4	5	6 <b>□</b>	7 <b>-</b>	8	9 <b>_</b>	10
Fire Safety Programs-Homeowners Planning Commissions, etc.		0	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	0	<b>.</b>	0	0
Specific Campaign Development	•								<b>a</b>	
Train Volunteer Fire Departments										
Utilize Volunteers										
Urban Interface										
Neighborhood Programs										
Mass Media-Radio										
Mass Media-Written										C
Mass Media-Television										C
Mass Media-General										C
Interagency Campaigns- CFFP, Characters	<b>a</b>	<b>a</b>	<b>a</b>	<b>a</b>		•	•	0	0	C
Fire Information										C
Children's Programs-Specific										C
Signing										C
Public Education—General										C
Printed Material-Other										C
High Visibility Patrol—Public Contact										C
High Visibility Fire Prevention— Militia, Visitor Centers, etc.	0		<b>a</b>	•	<b>a</b>		<b></b>			C
School Programs										C
Sports										C
Parades										C
Fairs										C
Exhibits/Displays										C
Internal Communication										C
Bilingual Programs										C

30 - Smoking Prevention Intervention



### SMOKING Prevention Intervention 6.3 = Not Applicable 2-4 = Public Awareness 5-8 = Effective 9-10 = Highly Effective COMPONENT: **ENGINEERING** Effectiveness Level 7 2 3 5 6 8 10 9 Establish Construction Activity Fire Criteria Notify Utilities of Fire Precautions Spot Check Utilities Inspection of Utilities, Power Lines, Railroads, etc. Campfire Safety Hazard Reduction (Incl. Prescribed Fire) Residential Evaluations/Inspections Land Use Development COMPONENT: **ENFORCEMENT** Fire Investigation Restricted Use Enforcement Codes/Ordinances Fire Precaution Regulations Spark Arresters Permits Inspections COMPONENT: ADMINISTRATION Early Warning Corporate Involvement Training Cooperative Fire Prevention Planning Smoking Prevention Intervention - 31 WILDFIRE PREVENTION STRATEGIES



# FIRE USE Prevention Intervention

6.4

04

WILDFIRE PREVENTION STRATEGIES

Related Causes: Trash Burning, Burning Dump, Field Burning,

Land Clearing, Slash Burning, Right-of-Way Burning,

Resource Mgmt. Burning, Other-Known/Unknown

Fire use related ignitions can be reduced through effective application of education and enforcement strategies.

COMPONENT: EDUCATION

32 - Fire Use Prevention Intervention

				Effe	ctiv	eness	Leve	el.		
The Oracle Manager	1	2	3	4	5	6 <b>□</b>	7 <b>-</b>	8	9	10
Fire Safety Material	u	u	ч	u		u	u			0
Fire Safety Programs-Homeowners Planning Commissions, etc.	<b>a</b>		0	٥	0	0			0	
Specific Campaign Development										
Train Volunteer Fire Departments										
Utilize Volunteers										
Urban Interface										
Neighborhood Programs										
Mass Media-Radio										
Mass Media-Written										
Mass Media-Television										
Mass Media-General										
Interagency Campaigns- CFFP, Characters		_			_	_		_		
Fire Information					_					_
Children's Programs-Specific			_	_			_	_	_	_
Signing		_								
Public Education-General								_		
Printed Material -Other										_
						_		_		_
High Visibility Patrol-Public Contact	_	J	J	U	J	J	J		J	_
High Visibility Fire Prevention— Militia, Visitor Centers, etc.	۵									
School Programs										
Sports										
Parades	<u> </u>		_	_	_	<u> </u>	_	_ _	_	
Fairs	<u> </u>	<u> </u>	_	_	_	_	<u> </u>	_	_	
Exhibits/Displays	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
Internal Communication										
Bilingual Programs							_			



### FIRE USE Prevention Intervention 6.4 = Not Applicable 2-4 = Public Awareness 5-8 = Effective 9-10 = Highly Effective COMPONENT: **ENGINEERING** Effectiveness Level 7 2 3 5 6 8 9 10 Establish Construction Activity Fire Criteria Notify Utilities of Fire Precautions Scot Check Utilities Inspection of Utilities, Power Lines, Railroads, etc. Campfire Safety Hazard Reduction (Incl. Prescribed Fire) Residential Evaluations/Inspections 🚨 Land Use Development COMPONENT: **ENFORCEMENT** Fire Investigation Restricted Use Enforcement Codes/Ordinances Fire Precaution Regulations Spark Arresters Permits Inspections COMPONENT: ADMINISTRATION Early Warning Corporate Involvement Training Cooperative Fire Prevention Planning WILDFIRE PREVENTION STRATEGIES Fire Use Prevention Intervention - 33



# INCENDIARY Prevention Intervention

6.5

05

Related Causes: Grudge Fire, Recurrent (Pyromania),

Other-Known/Unknown

Incendiary related ignitions can be reduced through effective application of education and enforcement strategies.

COMPONENT: EDUCATION

				Eff∈	ctiv	eness	Leve	el.		
Fire Safety Material	1	2 •	3	4	5	6 <b>□</b>	7 •	8	9 <b>□</b>	10
Fire Safety Programs-Homeowners Planning Commissions, etc.	٥		_		_	<u> </u>	_	0	0	_
Specific Campaign Development	ū									
Train Volunteer Fire Departments										
Utilize Volunteers										
Urban Interface										
Neighborhood Programs										
Mass Media-Radio										
Mass Media-Written										
Mass Media-Television										
Mass Media-General										
Interagency Campaigns- CFFP, Characters	<b>.</b>			0	0	•	•	0	•	
Fire Information										
Children's Programs-Specific										
Signing										
Public Education-General										
Printed Material-Other										
High Visibility Patrol-Public Contact										
High Visibility Fire Prevention— Militia, Visitor Centers, etc.	٥	0	•	0	0	<u> </u>	0		•	
School Programs										
Sports										
Parades										
Fairs										
Exhibits/Displays						0			0	
Internal Communication						0			0	
Bilingual Programs										

└ 34 - Incendiary Prevention Intervention



### INCENDIARY Prevention Intervention 6.5 2-4 = Public Awareness = Not Applicable 5-8 = Effective 9-10 = Highly Effective COMPONENT: ENGINEERING Effectiveness Level 5 7 3 8 9 10 Establish Construction Activity Fire Criteria Notify Utilities of Fire Precautions Scot Check Utilities Inspection of Utilities, Power Lines, Railroads, etc. Campfire Safety • Hazard Reduction (Incl. Prescribed Fire) Residential Evaluations/Inspections Land Use Development COMPONENT: **ENFORCEMENT** Fire Investigation Restricted Use Enforcement Codes/Ordinances Fire Precaution Regulations Spark Arresters Permits Inspections COMPONENT: ADMINISTRATION Early Warning Corporate Involvement Training Cooperative Fire Prevention Planning WILDFIRE PREVENTION STRATEGIES Incendiary Prevention Intervention - 35



# **EQUIPMENT** Prevention Intervention

6.6

Related Causes: Brakes, Blasting, Power Lines,

06

Other-Known/Unknown

Equipment related ignitions can be reduced through effective application of education, engineering, and enforcement strategies.

COMPONENT:	EDUCATION
------------	-----------

				Effe	ctiv	eness	Leve	al		
	1	2	3	4	5	6	7	8	9	10
Fire Safety Material							0	0		
<ul> <li>Fire Safety Programs-Homeowners Planning Commissions, etc.</li> </ul>										
Specific Campaign Development										
Train Volunteer Fire Departments										
Utilize Volunteers										
Urban Interface										
Neighborhood Programs										
Mass Media-Radio										
Mass Media-Written										
<ul> <li>Mass Media-Television</li> </ul>										
Mass Media-General										
Interagency Campaigns-										
CFFP, Characters										
Fire Information										
<ul> <li>Children's Programs-Specific</li> </ul>										
• Signing										
Public Education-General										
Printed Material-Other										
High Visibility Patrol-Public Contact										
<ul> <li>High Visibility Fire Prevention—</li> </ul>										
Militia, Visitor Centers, etc.										
School Programs										
• Sports										
• Parades										
• Fairs										
Exhibits/Displays										
Internal Communication										
Bilingual Programs	0					0	0	0	0	

36 - Equipment Prevention Intervention



### E OUI PMENT Prevention Intervention 6.6 = Not Applicable 2-4 = Public Awareness 5-8 = Effective 9-10 = Highly Effective COMPONENT: ENGINEERING Effectiveness Level 2 3 6 7 R 9 10 1 Establish Construction Activity a a 0 Fire Criteria o Notify Utilities of Fire Precautions Scot Check Utilities Inspection of Utilities, Power Lines, Railroads, etc. o Campfire Safety a $\mathbf{G}$ Hazard Reduction a (Incl. Prescribed Fire) Residential Evaluations/Inspections o o a a o Land Use Development **COMPONENT: ENFORCEMENT** a • Fire Investigation Restricted Use a a 0 Enforcement Codes/Ordinances a Fire Precaution Regulations a Spark Arresters Permits o o a Inspections COMPONENT: ADMINISTRATION Early Warning a O 0 0 Corporate Involvement a a Training Cooperative Fire Prevention a a Planning Equipment Prevention Intervention - 37 WILDFIRE PREVENTION STRATEGIES



# RAILROAD Prevention Intervention

6.7

Related Causes: Exhaust, Brakes, Other-Known/Unknown 07
Railroad related ignitions can be reduced through effective application
of engineering, and enforcement strategies.

	1	2	3	4	ctive 5	6	7	8	9	10
Fire Safety Material		ũ	٦	۵	٦	ů	á	ů	٥	
Fire Safety Programs-Homeowners								_		
Planning Commissions, etc.										
Specific Campaign Development										
Train Volunteer Fire Departments										
Utilize Volunteers										
Urban Interface										
Neighborhood Programs										
Mass Media-Radio										
Mass Media-Written										
Mass Media-Television										
Mass Media-General										
Interagency Campaigns- CFFP, Characters										
Fire Information										
Children's Programs—Specific										
Signing										
Public Education—General										
Printed Material-Other										
High Visibility Patrol-Public Contact										
High Visibility Fire Prevention- Militia, Visitor Centers, etc.										
School Programs										
Sports										
Parades										
Fairs										
Exhibits/Displays										
Internal Communication										
Bilingual Programs										



WILDFIRE PREVENTION STRATEGIES

38 - Railroad Prevention Intervention

### RAILROAD Prevention Intervention 6.7 = Not Applicable 2-4 = Public Awareness 5-8 = Effective 9-10 = Highly Effective COMPONENT: **ENGINEERING** Effectiveness Level 2 5 6 7 8 10 1 3 9 • Establish Construction Activity Fire Criteria Notify Utilities of Fire Precautions Scot Check Utilities Inspection of Utilities, Power Lines, Railroads, etc. • Campfire Safety Hazard Reduction (Incl. Prescribed Fire) Residential Evaluations/Inspections Land Use Development COMPONENT: ENFORCEMENT • Fire Investigation Restricted Use • Enforcement Codes/Ordinances Fire Precaution Regulations Spark Arresters Permits Inspections COMPONENT: ADMINISTRATION • Farly Warning • Corporate Involvement Training Cooperative Fire Prevention Planning



35

Railroad Prevention Intervention - 39

# JUVENILES Prevention Intervention

6.8

Related Causes: Recurrent, Fireworks, Ignition Devices (Matches, 08 Lighters, etc.), Other-Known/Unknown

Juvenile related ignitions can be reduced through effective application of education strategies.

COMPONENT: EDUCATION											
				Effe	ctive	eness	Leve	el.			
•	1	2	3	4	5	6	7	8	9	10	
Fire Safety Material											
• Fire Safety Programs-Homeowners	_	_	_	_	_	_	_	_	_	_	
Planning Commissions, etc.	_	_	_	_	_	_	_	_	<u> </u>	_	
Specific Campaign Development											
<ul> <li>Train Volunteer Fire Departments</li> </ul>											
Utilize Volunteers											
<ul> <li>Urban Interface</li> </ul>											
<ul> <li>Neighborhood Programs</li> </ul>											
Mass Media-Radio											
Mass Media-Written											
Mass Media-Television											
• Mass Media-General											
Interagency Campaigns-											
CFFP, Characters	<b>-</b>										
Fire Information											
<ul> <li>Children's Programs—Specific</li> </ul>											
• Signing											
Public Education-General											
Printed Material-Other											
High Visibility Patrol-Public Contact											
<ul> <li>High Visibility Fire Prevention-</li> </ul>											
Militia, Visitor Centers, etc.											
School Programs											
• Sports											
• Parades											
• Fairs											
Exhibits/Displays											
Internal Communication											

40 - Juveniles Prevention Intervention

Bilingual Programs



#### JUVENILES Prevention Intervention 6.8 = Not Applicable 2-4 = Public Awareness 9-10 = Highly Effective 5-8 = Effective COMPONENT: **ENGINEERING** Effectiveness Level 1 2 3 8 9 10 Establish Construction Activity Fire Criteria Notify Utilities of Fire Precautions Scot Check Utilities Inspection of Utilities, Power Lines, Railroads, etc. Campfire Safety Hazard Reduction (Incl. Prescribed Fire) Residential Evaluations/Inspections Land Use Development COMPONENT: **ENFORCEMENT** Fire Investigation Restricted Use Enforcement Codes/Ordinances Fire Precaution Regulations Spark Arresters Permits Inspections COMPONENT: ADMINISTRATION Early Warning Corporate Involvement Training Cooperative Fire Prevention Planning Juveniles Prevention Intervention - 41 WILDFIRE PREVENTION STRATEGIES



## MISCELLANEOUS Prevention Intervention

6.9

09

Related Causes: Aircraft, Burning Building, Fireworks (Adult), Other-Known/Unknown

Miscellaneous ignitions may be difficult to reduce because they do not identify a specific fire cause that can be targeted by the application of individual prevention strategies.

COMPONENT: EDUCATION

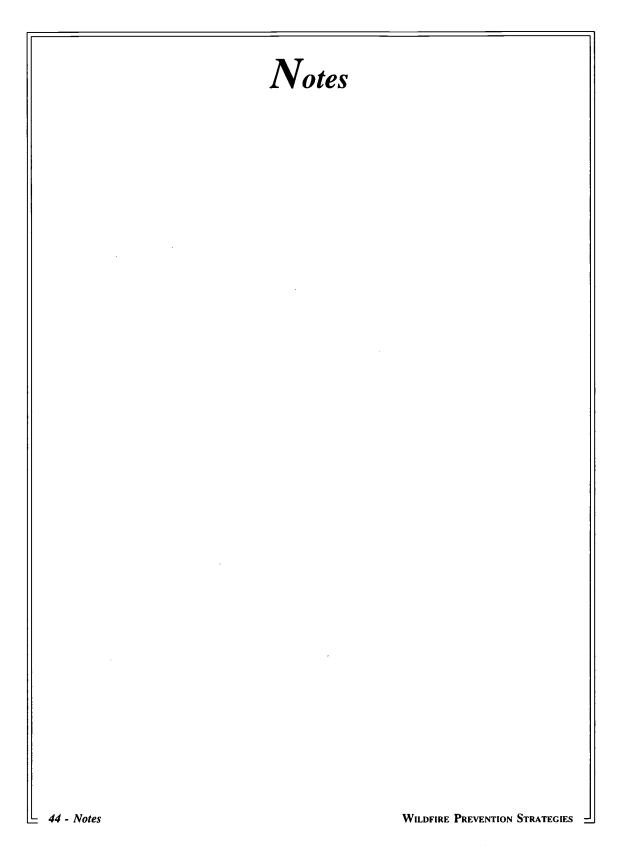
42 - Miscellaneous Prevention Intervention

					Eff∈	ctive	eness	Leve	al			
		1	2	3	4	5	6	7	8	9	10	
•	Fire Safety Material											
•	Fire Safety Programs-Homeowners Planning Commissions, etc.											
•	Specific Campaign Development						<u>.</u>					
•	Train Volunteer Fire Departments											
•	Utilize Volunteers											
•	Urban Interface											
•	Neighborhood Programs											
•	Mass Media-Radio											
•	Mass Media-Written											
•	Mass Media-Television											
•	Mass Media-General											
•	Interagency Campaigns- CFFP, Characters	<b>.</b>	0		<b>-</b>			<b>.</b>	·	<b>.</b>		
•	Fire Information											
•	Children's Programs-Specific											
•	Signing											
•	Public Education—General			• .								
•	Printed Material-Other											
•	High Visibility Patrol—Public Contact									. 🗖		
•	High Visibility Fire Prevention- Militia, Visitor Centers, etc.			_				-				
•	School Programs	_	_	_	_	_	_	_	_	_	_	
•	Sports	_	_	_	_	_	_	_	_	_	_	
•	Parades	_	_	_	_	_	_	_	_	_	_	
•	Fairs		_				_	_	_	_	_	
•	Exhibits/Displays		_									
_	Internal Communication								_	_		
_			_								_	
	Bilingual Programs	_	-	_	_	_		_	_	_	•	



#### MISCELLANEOUS Prevention Intervention 6.9 2-4 = Public Awareness = Not Applicable 5-8 = Effective 9-10 = Highly Effective COMPONENT: **ENGINEERING** Effectiveness Level 6 7 8 9 10 3 5 1 2 Establish Construction Activity Fire Criteria Notify Utilities of Fire Precautions Spot Check Utilities Inspection of Utilities, Power Lines, Railroads, etc. Campfire Safety • Hazard Reduction (Incl. Prescribed Fire) Residential Evaluations/Inspections Land Use Development COMPONENT: **ENFORCEMENT** • Fire Investigation a Restricted Use • Enforcement Codes/Ordinances Fire Precaution Regulations o 0 Spark Arresters Permits Inspections COMPONENT: ADMINISTRATION a Early Warning Corporate Involvement Training Cooperative Fire Prevention 0 o o Planning Miscellaneous Prevention Intervention - 43 WILDFIRE PREVENTION STRATEGIES







## Prevention Activities

7.0

The purpose of this section is to provide the wildland fire managers a variety of possible strategies or treatments in designing an effective prevention program. Keep in mind that this list is *not* all inclusive and that prevention activities/actions, not on this list may also prove to be effective. Also be aware that these activities/actions can be grouped to form effective wildfire prevention strategies.

This section lists fire prevention activities/actions that have proven to be successful in reducing ignitions and losses from wildland fires when applied effectively in the appropriate situations.

These prevention activities/actions can be applied at different levels. As an example, a number of "education" prevention activities such as media messages, school programs, public displays, etc., may be designed to increase awareness of a large target group over a widespread area. They are called "General Actions" and include prevention activities/actions that have application throughout an agency unit (example: park, forest, etc.). Since General Actions do not usually target specific fire causes nor individual user groups, it is difficult to quantify their effectiveness.

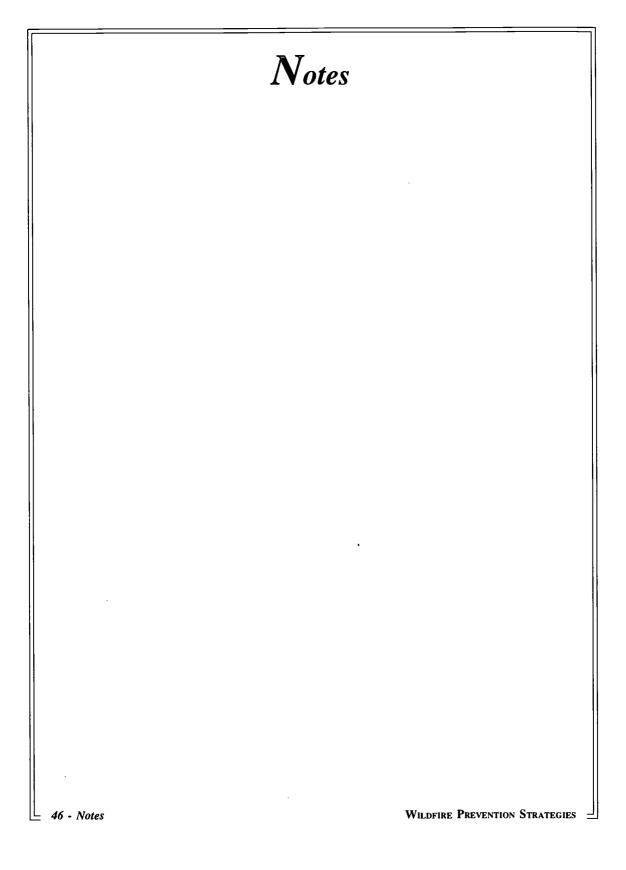
"Specific Actions" refer to those prevention activities/actions that target specific fire causes in a localized area. An example of using Specific Actions would be signing, patrolling and fireproofing a recreation area that has a history of escaped campfires. Specific Actions are more focused than General Actions and their effort is easier to see and quantify.

These activities are listed within the prevention components of Education, Engineering, Enforcement and Administration and are then grouped by their application method.

WILDFIRE PREVENTION STRATEGIES

Prevention Activities - 45







# **P**revention Activities

#### I. EDUCATION

Those activities that are aimed at changing people's behavior by awareness and knowledge.

A.	Community	<b>Fire</b>	Saf
л.	Community	rue	Suj

Provide fire safe video distribution to other agencies/
associations.

- Provide homeowner fire safety material as requested.
- Conduct fire safety programs with homeowner's associations.
- ☐ Conduct/participate in local town meetings.
- Conduct fire prevention public education programs with local service clubs.
- Participate with local county planning commissions.
- Provide training for volunteer fire departments in public education.
- Coordinate activities in a "Fire Awareness Time" annual campaign (spring clean-up, weed abatement program).
- Coordinate activities in a "Fall Fire Safety" annual campaign (wood stoves, flue, smoke alarms).
- Develop guidelines for field use on working with service clubs, V.I.P.'s, and community involvement programs.

WILDFIRE PREVENTION STRATEGIES

Prevention Activities - 47



16		
		Implement programs such as Neighborhood Watch, Junior Forest Ranger and Fire Safe programs.
	В.	Mass Media - Television
		Prepare seasonal PSA's/interviews for local use.
		Coordinate efforts with fire prevention cooperators to develop television public service announcements.
		Monitor and facilitate the national CFFP/AD Council program with local stations.
		Utilize effective fire information procedures/systems during incidents while stressing the importance of increased fire prevention efforts.
		Conduct afternoon local T.V. talk shows.
		Continue presenting rotating fire prevention messages on cable T.V.
	<b>C.</b>	Mass Media - Written/Radio
		Provide local radio PSA's to appropriate stations.
		Provide local written media with timely news releases.
		Develop a schedule of fire prevention activities/events/seasons and prepare news releases to be used on a scheduled basis.
		Conduct Children's Contest PSA.
		Provide local written media with timely news releases.
		Provide the written media with annual CFFP/AD Council packages/kit.
	= 48 - Prevention	Activities WILDFIRE PREVENTION STRATEGIES



D.	Mass Media - General				
	Public Meetings – Participate with City Councils, County Commissioners to proclaim Fire Prevention Week.				
	Develop a system to incorporate roadside billboard signing in selected areas.				
	Devel	op a fire prevention home page on the internet.			
<b>E.</b>	Public	c Awareness Through Electronic Media (Audio Visual)			
	_	porate fire prevention messages into existing and future ar audio/visual programming.			
		Pre-school (3-5 years old): Incorporate fire prevention messages into existing and future popular audio/visual programming.			
·		K-6 (5-12 years old): Utilize the current hero image in transmitting the fire prevention message, i.e., movie and T.V. heroes and sports figures.			
		7-12 (12-17 years old): Utilize the current hero and popular personalities via music videos, records, CD's, cassettes, radio and sports.			
		Adult (18+ years old): Utilize the popular personalities.			
F.	Signing				
	Develop and update annually a fire prevention sign plan that describes:				
Sign locations (highway, roadside, etc.) Sign standards (size, configuration) Types of messages (seasonally)					
WILDFIRE PRE	VENTION S	TRATEGIES Prevention Activities - 49			



	Maintenance responsibility Procurement procedures
	Install fire prevention signing at points of significant interest.
	Implement a highway rest stop fire prevention signing program.
	Implement a highway rest area/visitor information center fire prevention display program.
	Repair and maintain existing signs.
	Design and produce cause specific signing.
G.	Fire Prevention High Visibility Public Contact
	Establish engine patrol routes and implement on a needed basis, i.e., holidays, high use periods and weekends.
	Develop a hunter assistance patrol program to include fire prevention messages.
	Implement high visibility fire prevention efforts in the following areas:
	<ul> <li>□ Fire prevention patrol</li> <li>□ Visitor center fire prevention</li> <li>□ Organizational militia approach to fire prevention</li> </ul>
Н.	Agency Printed Material
	Evaluate all printed material (brochures, flyers, etc.) to determine if adequate fire prevention considerations are being displayed.
	Develop a review system to ensure fire management input into reprints/new printing of all documents.
L 50 - Prevention	Activities Wildfire Prevention Strategies



WILDFIRE PREVENTION STRATEGIES		ION STRATEGIES Prevention Activities -	· 51 =		
		Defensible Space Home Fire Protection Guide Fire Awareness Guide for Homeowners Fire Risk Rating for Homeowners in the Wildland Urba Interface	ın		
		tilize fire prevention materials, such as:			
		dult (18+ years): Same method as others but utilize such embols as bilingual, international, newspapers, magazines, osters, etc. Consider same themes as electronic media.			
		-12 (12-17 years): Same as K-6 but expand into teen-type agazines, stickers, posters, etc.			
		K-6 (5-12 years): Implement new and innovative printed material such as comic books, posters, stickers, etc. Consider utilization of the same themes as electronic media.			
		re-school (3-5 years): Develop the fire prevention message podated coloring and story books.	in		
		evelop publication standards and guidelines, and control rocedures for future publications or revised publications.			
		Inventory, plan, and evaluate future publication needs and develop a timeline for completion.			
		Review existing publications (evaluate, update, and re-publish) as needed.			
		articipate in a local fire council newspaper fire awareness sert project.			
		Determine if new material is needed to deal with specific fire management issues and arrange for production.			



Prevention Activities - 51

I.	Teenage - Young Adult Fire Prevention					
	Develop a fire prevention program geared toward teenagers and young adults.					
	Participate in a fire awareness program and career day activities at local intermediate schools.					
J.	Publi	c Education – General				
	for fir	Develop an organized effort, and provide "co-op" coordination for fire education activities associated with fire prevention characters.				
	Conduct the following prevention programs/contacts with schools in/or adjacent to priority areas (w/cooperators):					
		Kid Kit for Fire Safety Team teaching Conduct outdoor fire safety programs (campfire safety) Monitor/facilitate school fire safety curriculum Develop wildfire information programs for high school/ junior high school levels (i.e., school trading cards/ posters)				
	Continue the use of Smokey and the American Cowboy as prevention tool.					
	Participate in interagency education programs to maintain high visibility of the fire prevention effort. These are programs suc as: Smokey Bear (CFFP), Smokey Sports, parades, fairs, and displays.					
	Develop unique fire prevention campaigns.					
	Develop a homeowner fire safe practices education program.					
. 52 - Provention	Activitia	WILDEIDE PREVENTION STRATEGIES				



	Actively participate in local Fire Prevention Week promotions.				
	Conduct hunter safety sessions and stress fire prevention.				
	Develop a proposal/plan to utilize local area celebrities to promote wildfire prevention efforts.				
	Participate in educational programs to maintain high visibility of the fire prevention effort. These are programs such as:				
	<ul> <li>□ Little League/soccer</li> <li>□ Smokey Bear (CFFP)</li> <li>□ Smokey Sports</li> <li>□ Parades</li> <li>□ Fairs</li> <li>□ Displays</li> <li>□ Service clubs</li> </ul>				
	Conduct fire protection presentations to various local agencies.				
	Consider other fire prevention activities, such as:				
	☐ Fire Prevention Week - mall display ☐ Oil & gas show ☐ Recreation & boat show ☐ Utilize campground hosts in fire prevention ☐ Provide group tours of the fire facility ☐ Increase public contact by recreation technicians ☐ Provide fire prevention information at public rooms ☐ Conventions of conservation type groups ☐ Children's festival ☐ Hunter safety booth				
	Conduct outdoor Fire Safety programs, such as:				
Wasses	☐ Campground talks ☐ Hunter stations  Prevention Activities - 53 -				



	<ul> <li>□ Visitor centers</li> <li>□ Check stations</li> <li>□ Reception areas</li> </ul>		
	Consider additional school/youth educational activities with the following:		
	<ul> <li>□ Environmental education (4th grade)</li> <li>□ Day care centers</li> <li>□ Intermediate schools</li> <li>□ Fishing clinics</li> <li>□ Indian reservations</li> <li>□ Boy/Girl Scouts</li> </ul>		
К.	Internal Communication		
	Implement an agency internal communication system to ensure that employees know existing and predicted conditions such as protection strength, fire weather, fire activity and planned activities.		
L.	School Programs and Team Teaching		
	Develop a training package (slide/tapes and guidebook) to provide uniformity to team teaching.		
	Update existing team teaching programs.		
	Update existing individualized learning kits for K-3.		
	Develop an elementary fire prevention education program for computer application covering grades 4-6.		
	Develop an intermediate fire prevention education program for computer application covering grades 7-9.		
54 - Preventio	n Activities Wildfire Prevention Strategies		



	Develop an advanced education program for computer application covering grades 10-12.			
	Work with the Department of Education to rebuild rapport for fire prevention programs.			
	Develop guides for teachers for implementing fire prevention into their classrooms.			
	Provide a method for teacher training.			
	Develop a bilingual team teaching program.			
М.	Pre-School Fire Prevention			
	Develop an education kit to include visual aids, fire prevention messages, conservation messages, instructor's guide and employee's guide for presentation of materials. "Education Kit" could include 1) puppet show script and instructions; 2) development of a fire prevention game; 3) development of a coloring book to incorporate fire prevention rules.			
<i>N</i> .	Character Appearance			
	Conduct Smokey Bear and other character appearances, programs and other uses as per standard guidelines.			
0.	Wildfire Prevention Guides			
	Develop a Wildfire Prevention Guide for use by all employees.			
P.	Non-Traditional Fire Prevention: Multi-Cultural			
	Incorporate bilingual presentations into school programs as appropriate.			
Wildfire Prevention Strategies  Prevention Activities - 55				



			Develop b	ilingual written fire prevent	ion, such as:
			☐ Spec	m teaching cial use Permits persed camping regulations	
	II.	ENG	NEERIN	G	
		spark	arrester) or	n activity designed to shield remove the fuel which cou ance around a home).	
		<b>A.</b>	Power Lin	es / Construction Projects	/ Special Use
			Monitor/e	nforce all construction activ	rities.
			Notify all requirement	power line utilities, in writints.	ng, of fire prevention
			Complete	spot checks for compliance	
			Complete fire areas.	physical inspections of all p	power lines in hazardous
		В.	Hazard Re	eduction	
			Install and	maintain campground fire	pits/grates.
			Establish f	fuelbreak in the high risk/ha	azard areas.
			Complete	prescribed burning of piles,	debris, and slash.
			and develo	n area hazard reduction proped recreation sites, hunter concentrated public use and	camps, turnouts, and
=	56 - Pi	revention	Activities		WILDFIRE PREVENTION STRATEGIES =



Ē		Fire management will provide input into all recreation area/campground development projects.
C	3	Inspect agency facilities for fire hazards and hazard reduction needs.
		Inventory undeveloped sites and hazard areas, and complete necessary hazard reduction.
		Evaluate the use of prescribed fire to reduce hazards in high use/value areas.
C	3	Contact highway/road departments to complete/coordinate highway reduction projects. Meet with all appropriate agencies (pre-season) to prioritize projects.
C		Ensure agency owned/maintained roads/facilities are inspected and maintained.
C	<b>C.</b>	Railroads
C	3	Coordinate with cooperating agencies to annually inform the railroad companies of right-of-way clearance requirements and fire prevention measures.
_	<u> </u>	railroad companies of right-of-way clearance requirements and
С		railroad companies of right-of-way clearance requirements and fire prevention measures.  Complete spots checks on the right-of-way to ensure
D.	<b>-</b>	railroad companies of right-of-way clearance requirements and fire prevention measures.  Complete spots checks on the right-of-way to ensure compliance.
	□ D. -	railroad companies of right-of-way clearance requirements and fire prevention measures.  Complete spots checks on the right-of-way to ensure compliance.  Wildland-Urban Interface  Formalize a residential fire safe evaluation plan with the fire
	). 	railroad companies of right-of-way clearance requirements and fire prevention measures.  Complete spots checks on the right-of-way to ensure compliance.  Wildland-Urban Interface  Formalize a residential fire safe evaluation plan with the fire prevention cooperatives.



7 17. 17. 17. 17. 17. 17. 17. 17. 17. 17.		Coordinate land use development with county planning and zoning committees. Provide information/recommendation on fire safe practices in affected areas.
		Provide for fire safe inspections to residential sites.
	E.	Spark Arresters
		Conduct inspections on all internal combustion equipment on timber sale activities.
	F.	Campfire Safety
		Issue campfire permits as appropriate.
		Implement a campfire safety program, such as:
		<ul><li>□ Campfire safety handouts</li><li>□ Stake campfire rings at dispersed sites.</li></ul>
III. ENFORCEMENT		ORCEMENT
		activities used to gain compliance with fire regulations and
		nances.
	ordin	nances.
	ordin	Fire Investigation  Continue a fire investigation program to provide adequate fire
	ordin	Fire Investigation  Continue a fire investigation program to provide adequate fire cause determination.  All initial attack personnel will receive observation/point of origin/cause determination training (Introduction to Fire



	Investigate all human caused fires and process trespass actions when appropriate.
	Evaluate the district fire investigation program to develop recommendations:
	<ul> <li>□ Roles and responsibilities</li> <li>□ Staffing levels</li> <li>□ Training requirements</li> <li>□ Trespass effectiveness</li> </ul>
	Provide advanced fire investigation training to law enforcement officers.
В.	Fireworks
	Consider implementation of restricted use by issuing a Fireworks Prohibited Order.
	Post appropriate signs in HIGH risk areas, per the approved sign plan.
	Issue news releases, per the media contact list.
	Increased patrols in priority areas.
	Coordinate all special activities with cooperators.
	Participate with local cooperators in fireworks fire prevention. Activities will include:
Wil Dribt Port	☐ Increased high visibility patrols ☐ Post additional signs in hazardous areas ☐ Enforce existing restrictions ☐ Conduct door-to-door fire prevention campaign ☐ Provide for Neighborhood Watch presentations ☐ Smokey patrol on fire trucks  Prevention Activities - 59 ☐



	Consider implementation of restricted use by issuing a fireworks prohibited order.
<i>C</i> .	Public Use Restrictions / Closures
	Coordinate all fire restrictions and closures with cooperating agencies.
	Establish fire restriction orders (i.e., campfires, fireworks).
	Implement industrial fire precaution criteria.
	Issue Closed Area Activity permits as appropriate.
	Revise and issue Public Use Restriction/Closure Orders/plan as needed.
D.	Permits
	Review fire precaution criteria in all special use permits to ensure adequate fire safe considerations.
_	<u> </u>
_	ensure adequate fire safe considerations.  Issue cutting/welding/burning permits on public land, as
	ensure adequate fire safe considerations.  Issue cutting/welding/burning permits on public land, as required by regulation requirements and measurement direction.
	ensure adequate fire safe considerations.  Issue cutting/welding/burning permits on public land, as required by regulation requirements and measurement direction.  Continue issuance of the campfire permits, where applicable.  Coordinate the training and issue permits to appropriate personnel, to ensure proper issuing techniques and application



60 - Prevention Activities

<b>E</b> .	Spark Arresters
	Provide Spark Arrester inspections when fuelwood permit field checks are conducted.
	Provide Spark Arrester Guides to all appropriate employees.
	Authorized personnel will inspect equipment and off-highway vehicles for legal spark arresters routinely, in applicable areas.
	Individuals responsible for spark arrester inspections will be provided training and spark arrester guides.
	Authorized personnel will issue warnings, and/or terminate the activity.
	In areas of concentrated use, interagency task force activity will be implemented and take necessary actions.
F.	Shooting
	Personal contact will be done in all appropriate areas.
	Personnel will be trained in the risk of fire ignitions by special ammunition.
<i>G</i> .	Industrial Operations
	Implement standards and guidelines for all industrial operations.
	Administer an "Industrial Fire Precaution Level" program.
,	
Wildfire Prev	VENTION STRATEGIES Prevention Activities - 61



ŀ	IV.	IV. ADMINISTRATION		
		Those activities that are required to maintain a fire prevention program.		
		<b>A.</b>	Early Warning	
			High fire danger conditions which include, but are not litto, the following, will require additional strategies:	imited
			□ Spring/fall seasons □ Low fuel moisture □ Extreme burning index □ Dry lightning □ Depleted initial attack capabilities (resource draw Going fires □ Red flag weather conditions  The above indicators will require consideration of the form	
			measures:  Additional staffing Pre-positioning of resources Increased detection Patrols Media applications	
		В.	Corporate Involvement	
			Pursue corporate sponsorships/partnerships to enhance I fire prevention programs.	ocal
		<i>C</i> .	Fire Prevention Training	
			Provide "Introduction to Fire Prevention" training (P-10 selected employees.	1) for
	= 62 - 1	Prevention	n Activities Wildfire Prevention	Strategies



	Specific skill requirements will be developed and specialized training will be provided; i.e., spark arrester, signs, permits.
	Develop specific skill requirements by position, and provide specialized training required for these positions (examples, campfire permits, spark arresters, power lines, fire prone property, shooting, etc.).
	Train volunteers and agency militia in fire prevention to complete selected fire prevention activities.
	Develop a Basic Fire Prevention Guide for employees.
D.	Volunteers in Prevention (V.I.P.'s)
	Conduct a feasibility study to determine if volunteers can be effective to conduct selected fire prevention activities. This includes both internal and external people.
	Recruit/train volunteers in fire prevention to complete selected fire prevention activities.
<b>E.</b>	Cooperative Fire Prevention
	Prepare a fire prevention action plan/expectations, to be included in all operating plans with cooperating agencies. This will provide direction as to the fire prevention objectives.
	Develop a feasibility study to determine if the implementation of an Interagency Fire Prevention Committee would be appropriate.
F.	Inventory of Available Fire Prevention Resources
	Develop an inventory of academic opportunities of all training, workshops, and seminars to be published annually.
Wildfire Pre	vention Strategies Prevention Activities - 63



П		
		Provide a catalog of training and informational aids, materials, documents, etc., and provide for distribution at three locations in the state.
		Prepare and update annually a directory of multi-agency fire prevention specialists to include identification and subject matter expertise.
	<i>G</i> .	Fire Prevention Planning
		Maintain an updated wildfire prevention plan.
		Maintain appropriate fire cause information and atlas.
		Complete the fire prevention workload analysis.
		Develop a system to utilize the fire prevention assessment and plan, and the workload analysis.
	_ 64 - Prevention	Activities WILDFIRE PREVENTION STRATEGIES =



# Sample Prevention Strategy

8.0

This section combines the wildfire prevention activities from Section 7.0 to demonstrate how these activities may be grouped to form prevention strategies that most effectively target and reduce specific fire cause ignitions and reduce losses from wildland fires.

It is important that accurate fire occurrence records are available as these strategies target specific fire causes. For example, if a unit's major fire cause is Miscellaneous it is difficult to determine which prevention actions and strategies would be most effective in reducing fire causes. On the other hand, a unit with accurate knowledge of fire causes, locations and dates can design an effective fire prevention program which targets the priority fire causes in specific locations when appropriate.

WILDFIRE PREVENTION STRATEGIES

Sample Prevention Strategy - 65





66 - Notes



## NATURAL FIRE Prevention Strategy

8.1

Related Causes: Lightning, Volcanic, Other-Known/Unknown

01

#### I. EDUCATION

Those activities that are aimed at changing people's behavior by awareness and knowledge.

## A. Community Fire Safe

- 1. Conduct fire prevention public education programs with local service clubs.
- 2. Provide homeowner fire safety material.
- 3. Coordinate activities in a "Fire Awareness Time" annual campaign (spring clean-up, weed abatement program).

### B. Mass Media - Television

1. Prepare seasonal PSA's for local use.

## C. Fire Prevention High Visibility Public Contact

1. Establish patrol routes and implement when events occur.

## D. Agency Printed Material

- 1. Evaluate printed material to determine if adequate information is available to persons exposed to this threat.
- 2. Utilize fire prevention material.

WILDFIRE PREVENTION STRATEGIES

Natural Fire Prevention Strategy - 67



## II. ENGINEERING

## A. Hazard Reduction

- 1. Establish fuelbreaks in lightning prone areas.
- 2. Evaluate the use of prescribed fire to reduce hazards in lightning prone areas.

## B. Wildland-Urban Interface

1. Provide public education and fire safe evaluations in lightning prone areas.

68 - Natural Fire Prevention Strategy



## CAMPFIRES Prevention Strategy

8.2

02

Related Causes: Cooking/Warming Fire, Other-Known/Unknown

## I. EDUCATION

Those activities that are aimed at changing people's behavior by awareness and knowledge.

## A. Community Fire Safe

- 1. Conduct fire prevention public education programs with local service clubs.
- 2. Provide training for volunteer fire departments in public education.
- 3. Coordinate activities in a "Fire Awareness Time" annual campaign (spring clean-up, weed abatement program).

#### B. Mass Media - Television

- 1. Prepare seasonal PSA's/interviews for local use.
- 2. Coordinate efforts with fire prevention cooperators to develop a television public service announcement on campfire safety.
- 3. Monitor and facilitate the national CFFP/AD Council program with local stations.
- 4. Utilize effective fire information procedures/systems during incidents while stressing the importance of increased fire prevention efforts.
- 5. Conduct afternoon local T.V. talk shows.

WILDFIRE PREVENTION STRATEGIES

Campfires Prevention Strategy - 69



6. Continue presenting rotating fire prevention messages on cable T.V.

### C. Mass Media - Written/Radio

- 1. Provide local radio PSA's to appropriate stations.
- 2. Provide local written media with timely news releases.
- 3. Provide the written media with annual CFFP/AD Council packages/kit.

## D. Signing

- 1. Install fire prevention signing at points of significant interest.
- 2. Repair and maintain existing signs.
- 3. Design and produce cause specific signing.

## E. Fire Prevention High Visibility Public Contact

- 1. Establish engine patrol routes and implement on a needed basis, i.e., holidays, high use periods and weekends.
- 2. Develop a hunter assistance patrol program to include fire prevention messages.

## F. Agency Printed Material

1. Determine if new material is needed to deal with specific fire management issues and arrange for production.

70 - Campfires Prevention Strategy



## G. Teenage - Young Adult Fire Prevention

1. Develop a fire prevention program geared toward teenagers and young adults.

### H. Public Education - General

- 1. Conduct the following prevention programs/contacts with local schools in/or adjacent to priority areas (w/ cooperators):
  - Conduct outdoor fire safety programs (campfire safety)
- 2. Participate in Interagency education programs to maintain high visibility of the fire prevention effort. These are programs such as: Smokey Bear (CFFP), Smokey Sports, parades, fairs, and displays.
- 3. Develop unique campfire fire prevention campaign.
- 4. Conduct hunter safety sessions and stress fire prevention.
- 5. Consider other fire prevention activities, such as:
  - Fire Prevention Week displays
  - Recreation & boat show
  - Utilize campground hosts in fire prevention
  - Increase public contact by recreation technicians
  - Provide fire prevention information at public rooms
  - Hunter safety booth

WILDFIRE PREVENTION STRATEGIES

Campfires Prevention Strategy - 71



- 6. Conduct outdoor fire safety programs, such as:
  - Campground talks
  - Hunter stations
  - Visitor centers
  - Check stations
  - Reception areas
- 7. Consider additional school/youth educational activities with the following:
  - Intermediate schools
  - Fishing clinics
  - Indian reservations
  - Boy/Girl Scouts

## II. ENGINEERING

Engineering is an activity designed to shield an ignition source (e.g. spark arrester) or remove the fuel which could ignite from a spark or fire brand (clearance around a home).

#### A. Hazard Reduction

- 1. Install and maintain campground fire pits/grates.
- 2. Develop an area hazard reduction program to address dispersed and developed recreation sites, hunter camps, turnouts, and places of concentrated public use and population zones.
- 3. Inventory undeveloped sites and hazard areas, and complete necessary hazard reduction.

72 - Campfires Prevention Strategy



## B. Campfire Safety

- 1. Issue campfire permits as appropriate.
- 2. Implement a campfire safety program, such as:
  - Campfire safety handouts
  - Stake campfire ring sites at dispersed recreation areas

### III. ENFORCEMENT

The activities used to gain compliance with fire regulations and ordinances.

## A. Public Use Restrictions / Closures

- 1. Coordinate all fire restrictions and closures with cooperating agencies.
- 2. Establish fire restriction orders (i.e., campfires, fireworks).

#### B. Permits

- 1. Continue issuance of the campfire permits, where applicable.
- 2. Coordinate the training and issue permits to appropriate personnel, to ensure proper issuing techniques and application prior to fire season.

WILDFIRE PREVENTION STRATEGIES

Campfires Prevention Strategy - 73



## IV. ADMINISTRATION

Those activities that are required to maintain a fire prevention program.

## A. Fire Prevention Planning

- 1. Maintain an updated wildfire prevention plan.
- 2. Maintain appropriate fire cause information and atlas.
- 3. Participate in wildfire prevention committees.
- 4. Train for non-fire personnel.

74 - Campfires Prevention Strategy



## SMOKING Prevention Strategy

8.3

Related Causes:

Smoking Activities

03

#### I. EDUCATION

Those activities that are aimed at changing people's behavior by awareness and knowledge.

## A. Community Fire Safe

- 1. Conduct fire prevention public education programs with local service clubs.
- 2. Provide training for volunteer fire departments in public education.

#### B. Mass Media - Television

1. Prepare seasonal PSA's/interviews for local use.

### C. Mass Media - Written/Radio

- 1. Provide local radio PSA's to appropriate stations.
- 2. Provide local written media with timely news releases.
- 3. Provide the written media with annual CFFP/AD Council packages/kit.

## D. Signing

1. Install fire prevention signing at points of significant interest.

WILDFIRE PREVENTION STRATEGIES

Smoking Prevention Strategy - 75



- 2. Implement a highway rest stop fire prevention signing program.
- 3. Implement a highway rest area/visitor information center fire prevention display program.
- 4. Repair and maintain existing signs.
- 5. Design and produce cause-specific signing.

## E. Fire Prevention High Visibility Public Contact

- 1. Establish engine patrol routes and implement on a needed basis, i.e., holidays, high use periods and weekends.
- 2. Develop a hunter assistance patrol program to include fire prevention messages.

## F. Agency Printed Material

- 1. Evaluate all printed material (brochures, flyers, etc.) to determine if adequate fire prevention considerations are being displayed.
- 2. Determine if new material is needed to deal with specific fire management issues and arrange for production.

#### G. Public Education - General

- 1. Develop unique fire prevention campaigns.
- 2. Actively participate in local Fire Prevention Week promotions.
- 3. Conduct hunter safety sessions and stress fire prevention.

76 - Smoking Prevention Strategy



- 4. Conduct outdoor fire safety programs, such as:
  - Campground talks
  - Hunter stations
  - Visitor centers
  - Check stations
  - Reception areas

#### H. Non-Traditional Fire Prevention: Multi-Cultural

- 1. Develop bilingual written fire prevention, such as:
  - Smoking safety

## II. ENGINEERING

Engineering is an activity designed to shield an ignition source (e.g. spark arrester) or remove the fuel which could ignite from a spark or fire brand (clearance around a home).

#### A. Hazard Reduction

- 1. Develop an area hazard reduction program to address dispersed and developed recreation sites, hunter camps, turnouts, and places of concentrated public use and population zones
- 2. Maintain this hazard reduction program in areas that are frequented and used by smokers. Provide "Smoke Here" areas if necessary.

#### III. ENFORCEMENT

The activities used to gain compliance with fire regulations and ordinances.

WILDFIRE PREVENTION STRATEGIES

Smoking Prevention Strategy - 77



## A. Fire Investigation

- 1. Continue a fire investigation program to provide adequate fire cause determination.
- 2. All initial attack personnel will receive observation/point of origin/cause determination training (Fire Cause and Determination P-151).

#### B. Public Use Restrictions / Closures

- 1. Coordinate all fire restrictions and closures with cooperating agencies.
- 2. Establish fire restriction orders (i.e., campfires, fireworks, smoking in designated areas only, etc.).
- 3. Revise and issue Public Use Restriction/Closure Orders/plan as needed.

## IV. ADMINISTRATION

Those activities that are required to maintain a fire prevention program.

## A. Fire Prevention Planning

- 1. Maintain an updated wildfire prevention plan.
- 2. Maintain appropriate fire cause information and atlas.
- 3. Participate in wildfire prevention committees.
- 4. Train for non-fire personnel.

78 - Smoking Prevention Strategy



# FIRE USE Prevention Strategy

8.4

Related Causes:

Trash Burning, Burning Dump, Field Burning, 04
Land Clearing, Slash Burning, Right-of-Way Burning,
Resource Momt. Burning, Other-Known/Unknown

#### I. EDUCATION

Those activities that are aimed at changing people's behavior by awareness and knowledge.

## A. Community Fire Safe

- 1. Provide homeowner fire safety material as requested.
- 2. Conduct fire safety programs with homeowner's associations.
- 3. Conduct/participate in local town meetings.
- 4. Conduct fire prevention public education programs with local service clubs.
- 5. Provide training for volunteer fire departments in public education.
- 6. Coordinate activities in a "Fire Awareness Time" annual campaign (spring clean-up, weed abatement program).
- 7. Coordinate activities in a "Fall Fire Safety" annual campaign (wood stoves, flue, smoke alarms).
- 8. Implement programs such as Neighborhood Watch, Junior Forest Ranger and Fire Safe programs.

WILDFIRE PREVENTION STRATEGIES

Fire Use Prevention Strategy - 79



#### B. Mass Media - Television

- 1. Prepare seasonal PSA's/interviews for local use.
- 2. Coordinate efforts with fire prevention cooperators to develop television public service announcements.
- 3. Coordinate media contacts with cooperating agencies.
- 4. Continue presenting rotating fire prevention messages on cable T.V.

#### C. Mass Media - Written/Radio

- 1. Provide local radio PSA's to appropriate stations.
- 2. Provide local written media with timely news releases.
- 3. Develop a schedule of fire prevention activities/events/ seasons and prepare news releases to be used on a scheduled basis.
- 4. Provide the written media with annual CFFP/AD Council packages/kit.

# D. Signing

- 1. Develop and update annually a fire prevention sign plan that describes:
  - Sign locations (highway, roadside, etc.)
  - Sign standards (size, configuration)
  - Types of messages (seasonally)
  - Maintenance responsibility
  - Procurement procedures

80 - Fire Use Prevention Strategy



- 2. Install fire prevention signing at points of significant interest.
- 3. Repair and maintain existing signs.
- 4. Design and produce cause specific signing.

## E. Fire Prevention High Visibility Public Contact

- 1. Establish engine patrol routes and implement on a needed basis, i.e., holidays, high use periods and weekends.
- 2. Implement high visibility fire prevention efforts in the following areas:
  - Fire prevention patrol
  - Visitor center fire prevention
  - Organizational militia approach to fire prevention

## F. Agency Printed Material

- 1. Determine if new material is needed to deal with specific fire management issues and arrange for production.
- 2. Participate in a local fire council newspaper fire awareness insert project.
- 3. Utilize fire prevention materials, such as:
  - Defensible Space
  - Home Fire Protection Guide
  - Fire Awareness Guide for Homeowners

#### G. Public Education - General

1. Develop unique fire prevention campaigns.

WILDFIRE PREVENTION STRATEGIES

Fire Use Prevention Strategy - 81



- 2. Develop a homeowner fire safe practices education program.
- 3. Actively participate in local Fire Prevention Week promotions.
- 4. Participate in educational programs to maintain high visibility of the fire prevention effort. These are programs such as:
  - Fairs
  - Displays
  - Service clubs
- 5. Conduct outdoor fire safety programs, such as:
  - Visitor centers
  - Reception areas

#### II. ENGINEERING

Engineering is an activity designed to shield an ignition source (e.g. spark arrester) or remove the fuel which could ignite from a spark or fire brand (clearance around a home).

#### A. Hazard Reduction

1. Establish fuelbreak in the high risk/hazard areas.

## B. Wildland-Urban Interface

- 1. Formalize a residential fire safe evaluation plan.
- 2. Provide for fire safe inspections to residential sites.

82 - Fire Use Prevention Strategy



#### III. ENFORCEMENT

The activities used to gain compliance with fire regulations and ordinances.

## A. Fire Investigation

1. Continue a fire investigation program to provide adequate fire cause determination.

#### B. Public Use Restrictions / Closures

- 1. Revise and issue public use restrictions on fire use.
- 2. Enforce existing codes and ordinances.

#### C. Permits

- 1. Issue cutting/welding/burning permits on public/private land, as required by regulation requirements and measurement direction.
- 2. Coordinate the training and issue permits to appropriate personnel, to ensure proper issuing techniques and application prior to fire season.

WILDFIRE PREVENTION STRATEGIES

Fire Use Prevention Strategy - 83



## IV. ADMINISTRATION

Those activities that are required to maintain a fire prevention program.

# A. Fire Prevention Planning

- 1. Maintain an updated wildfire prevention plan.
- 2. Maintain appropriate fire cause information and atlas.
- 3. Participate in wildfire prevention committees.
- 4. Train for non-fire personnel.

84 - Fire Use Prevention Strategy



# INCENDIARY Prevention Strategy

8.5

Related Causes:

Grudge Fire, Recurrent (Pyromania),

Other-Known/Unknown

05

#### I. EDUCATION

Those activities that are aimed at changing people's behavior by awareness and knowledge.

## A. Community Fire Safe

- 1. Conduct fire safety programs with homeowner's associations.
- 2. Conduct fire prevention public education programs with local service clubs.
- 3. Provide training for volunteer fire departments in public education.

#### B. Mass Media - Television

- 1. Utilize effective fire information procedures/systems during incidents while stressing the importance of increased fire prevention efforts.
- 2. Conduct afternoon local T.V. talk shows.
- 3. Continue presenting rotating fire prevention messages on cable T.V.

#### C. Mass Media - Written/Radio

- 1. Provide local radio PSA's to appropriate stations.
- 2. Provide local written media with timely news releases.

WILDFIRE PREVENTION STRATEGIES

Incendiary Prevention Strategy - 85



- 3. Develop a schedule of fire prevention activities/events/ seasons and prepare news releases to be used on a scheduled basis.
- 4. Provide local radio PSA book to appropriate stations.
- 5. Provide local written media with timely news releases.
- 6 Provide the written media with annual CFFP/AD Council packages/kit.

## D. Signing

- 1. Develop and update annually a fire prevention sign plan that describes:
  - Sign locations (highway, roadside, etc.)
  - Sign standards (size, configuration)
  - Types of messages (seasonally)
  - Maintenance responsibility
  - Procurement procedures
- 2. Install fire prevention signing at points of significant interest.
- 3. Repair and maintain existing signs.
- 4. Design and produce cause specific signing.

# E. Fire Prevention High Visibility Public Contact

1. Establish engine patrol routes and implement on a needed basis, i.e., holidays, high use periods and weekends.

86 - Incendiary Prevention Strategy



- 2. Implement high visibility fire prevention efforts in the following areas:
  - Fire prevention patrol
  - Visitor center fire prevention
  - Organizational militia approach to fire prevention

## F. Agency Printed Material

1. Evaluate all printed material (brochures, flyers, etc.) to determine if adequate fire prevention considerations are being displayed.

## G. Public Education - General

1. Develop unique fire prevention campaigns.

#### H. Internal Communication

1. Implement an agency internal communication system to ensure that employees know existing and predicted conditions such as protection strength, fire weather, fire activity and planned activities.

#### II. ENGINEERING

Engineering is an activity designed to shield an ignition source (e.g. spark arrester) or remove the fuel which could ignite from a spark or fire brand (clearance around a home).

#### A. Hazard Reduction

1. Establish fuelbreak in the high risk/hazard areas.

WILDFIRE PREVENTION STRATEGIES

Incendiary Prevention Strategy - 87



- 2. Develop an area hazard reduction program to address dispersed and developed recreation sites, hunter camps, turnouts, and places of concentrated public use and population zones.
- 3. Evaluate the use of prescribed fire to reduce hazards in high use/value areas.
- 4. Contact highway/road departments to complete/ coordinate highway reduction projects. Meet with all appropriate agencies (pre-season) to prioritize projects.

#### III. ENFORCEMENT

The activities used to gain compliance with fire regulations and ordinances.

#### A. Fire Investigation

- 1. Continue a fire investigation program to provide adequate fire cause determination. Develop an arson task force if needed.
- 2. All initial attack personnel will receive observation/point of origin/cause determination training (Fire Cause and Determination P-151).
- 3. Investigate all human caused fires and process trespass actions when appropriate.

#### B. Public Use Restrictions / Closures

- 1. Coordinate all fire restrictions and closures with cooperating agencies.
- 2. Issue Public Use Restriction/Closure Orders/plan as needed.

88 - Incendiary Prevention Strategy



## IV. ADMINISTRATION

Those activities that are required to maintain a fire prevention program.

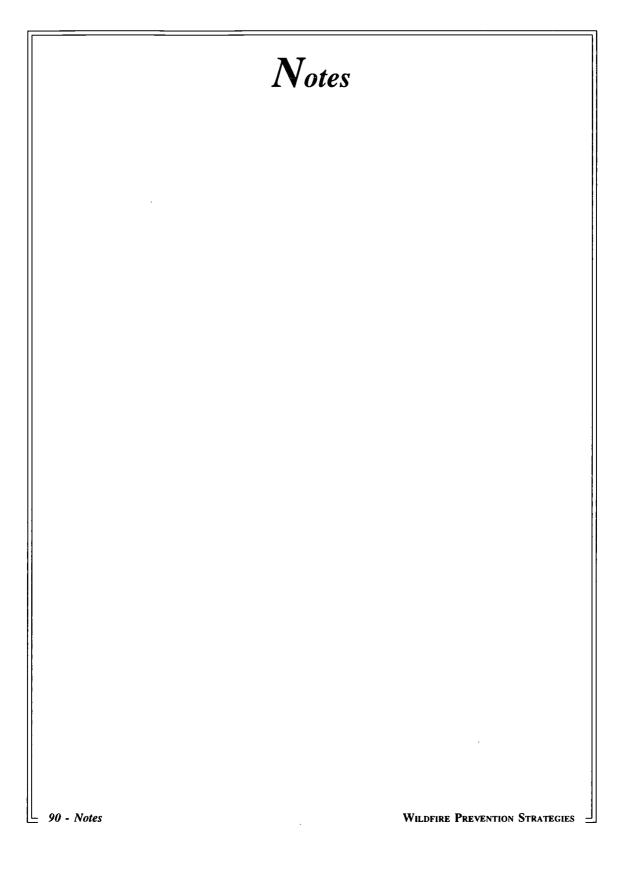
## A. Fire Prevention Planning

- 1. Maintain an updated wildfire prevention plan.
- 2. Maintain appropriate fire cause information and atlas.
- 3. Participate in wildfire prevention committees.
- 4. Train for non-fire personnel.

WILDFIRE PREVENTION STRATEGIES

Incendiary Prevention Strategy - 89







# EQUIPMENT Prevention Strategy

8.6

Related Causes: Brakes, Blasting, Power Lines, Other-Known/ Unknown 06

#### I. EDUCATION

Those activities that are aimed at changing people's behavior by awareness and knowledge.

## A. Community Fire Safe

- 1. Provide homeowner fire safety material as requested.
- 2. Conduct fire safety programs with homeowner's associations.
- 3. Conduct/participate in local town meetings.
- 4. Provide training for volunteer fire departments in public education.
- 5. Coordinate activities in a "Fire Awareness Time" annual campaign (spring clean-up, weed abatement program).
- 6. Coordinate activities in a "Fall Fire Safety" annual campaign (wood stoves, flue, smoke alarms).

#### B. Mass Media - Television

- 1. Prepare seasonal PSA's/interviews for local use.
- 2. Monitor and facilitate the national CFFP/AD Council program with local stations.

WILDFIRE PREVENTION STRATEGIES

Equipment Prevention Strategy - 91



- 3. Utilize effective fire information procedures/systems during incidents while stressing the importance of increased fire prevention efforts.
- 4. Continue presenting rotating fire prevention messages on cable T.V.

#### C. Mass Media - Written/Radio

- 1. Provide local radio PSA's to appropriate stations.
- 2. Provide local written media with timely news releases.
- 3. Develop a schedule of fire prevention activities/events/ seasons and prepare news releases to be used on a scheduled basis.
- 4. Provide local written media with timely news releases.

## D. Signing

- 1. Develop and update annually a fire prevention sign plan that describes:
  - Sign locations (highway, roadside, etc.)
  - Sign standards (size, configuration)
  - Types of messages (seasonally)
  - Maintenance responsibility
  - Procurement procedures
- 2. Install fire prevention signing at points of significant interest.
- 3. Repair and maintain existing signs.
- 4. Design and produce cause specific signing.

92 - Equipment Prevention Strategy



## E. Fire Prevention High Visibility Public Contact

- 1. Establish engine patrol routes and implement on a needed basis, i.e., holidays, high use periods and weekends.
- 2. Implement high visibility fire prevention efforts in the following areas:
  - Fire prevention patrol
  - Visitor center fire prevention
  - Organizational militia approach to fire prevention

## F. Agency Printed Material

1. Evaluate all printed material (brochures, flyers, etc.) to determine if adequate fire prevention considerations are being displayed.

#### G. Public Education - General

- 1. Participate in educational programs to maintain high visibility of the fire prevention effort. These are programs such as:
  - Fairs
  - Displays
  - Service clubs
- 2. Consider other fire prevention activities, such as:
  - Fire Prevention Week mall display
  - Provide fire prevention information at public rooms
  - Conventions of conservation type groups

WILDFIRE PREVENTION STRATEGIES

Equipment Prevention Strategy - 93



- 3. Conduct outdoor fire safety programs, such as:
  - Campground talks
  - Hunter stations
  - Visitor centers
  - Check stations
  - Reception areas
- 4. Develop a unique equipment fire safety campaign.

#### H. Non-Traditional Fire Prevention: Multi-Cultural

- 1. Develop bilingual written fire prevention, such as:
  - Fire regulations

#### II. ENGINEERING

Engineering is an activity designed to shield an ignition source (e.g. spark arrester) or remove the fuel which could ignite from a spark or fire brand (clearance around a home).

#### A. Hazard Reduction

- 1. Contact highway/road departments to complete/ coordinate highway reduction projects. Meet with all appropriate agencies (pre-season) to prioritize projects.
- 2. Ensure agency owned/maintained roads/facilities are inspected and maintained.

## B. Spark Arresters

1. Conduct inspections on all internal combustion equipment on timber sale activities.

94 - Equipment Prevention Strategy



## III. ENFORCEMENT

The activities used to gain compliance with fire regulations and ordinances.

## A. Fire Investigation

1. Continue a fire investigation program to provide adequate fire cause determination.

#### B. Public Use Restrictions / Closures

- 1. Coordinate all fire restrictions and closures with cooperating agencies.
- 2. Establish fire restriction orders (i.e., campfires, fireworks).
- 3. Revise and issue Public Use Restriction/Closure Orders/plan as needed.

## C. Permits

1. Issue cutting/welding/burning permits on public/private land, as required by regulation requirements and measurement direction.

## D. Spark Arresters

- 1. Provide spark arrester inspections when fuelwood permit field checks are conducted.
- 2. Provide Spark Arrester Guides to all appropriate employees.

WILDFIRE PREVENTION STRATEGIES

Equipment Prevention Strategy - 95



- 3. Authorized personnel will inspect equipment and off-highway vehicles for legal spark arresters routinely, in applicable areas.
- 4. Individuals responsible for spark arrester inspections will be provided training and spark arrester guides.
- 5. Authorized personnel will issue warnings, and/or terminate the activity.
- 6. In areas of concentrated use, interagency task force activity will be implemented and take necessary actions.

## E. Industrial Operations

- 1. Implement standards and guidelines for all industrial operations as per the guide.
- 2. Administer an "Industrial Fire Precaution Level" program.

#### IV. ADMINISTRATION

Those activities that are required to maintain a fire prevention program.

#### A. Volunteers in Prevention (V.I.P.'s)

1. Recruit/train volunteers in fire prevention to complete selected fire prevention activities.

#### B. Fire Prevention Planning

- 1. Maintain an updated wildfire prevention plan.
- 2. Maintain appropriate fire cause information and atlas.

96 - Equipment Prevention Strategy



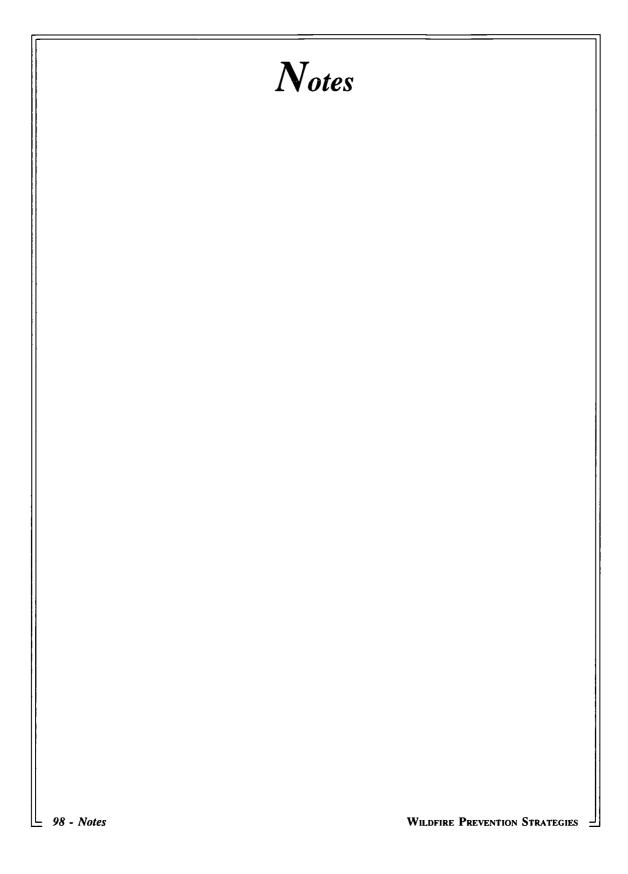
3. Participate in wildfire prevention committees.

4. Train for non-fire personnel.

WILDFIRE PREVENTION STRATEGIES

Equipment Prevention Strategy - 97







# RAILROAD Prevention Strategy

8.7

Related Causes: Exhaust, Brakes, Other-Known/Unknown

07

#### I. EDUCATION

Those activities that are aimed at changing people's behavior by awareness and knowledge.

## A. Fire Prevention High Visibility Public Contact

1. Establish engine patrol routes and implement on a needed basis, i.e., holidays, high use periods and weekends.

#### B. Public Education – General

1. Develop a unique railroad fire prevention campaign with local railroad companies. Provide incentives.

#### II. ENGINEERING

Engineering is an activity designed to shield an ignition source (e.g. spark arrester) or remove the fuel which could ignite from a spark or fire brand (clearance around a home).

#### A. Hazard Reduction

1. Evaluate the use of prescribed fire to reduce hazards in high use/value areas.

#### B. Railroads

1. Coordinate, with cooperating agencies, to annually inform the railroad companies of right-of-way clearance requirements and fire prevention measures.

WILDFIRE PREVENTION STRATEGIES

Railroad Prevention Strategy - 99



2. Complete spots checks on the right-of-way to ensure compliance.

#### III. ENFORCEMENT

The activities used to gain compliance with fire regulations and ordinances.

## A. Fire Investigation

- 1. Continue a fire investigation program to provide adequate fire cause determination.
- 2. All initial attack personnel will receive observation/point of origin/cause determination training (Fire Cause and Determination P-151).
- 3. Inspect railroad right-of-way.

## B. Spark Arresters

- 1. Provide Spark Arrester Guides to all appropriate employees.
- 2. Individuals responsible for railroad spark arrester inspections will be provided training and spark arrester guides.
- 3. Authorized personnel will issue warnings, and/or terminate the activity.

100 - Railroad Prevention Strategy



## IV. ADMINISTRATION

Those activities that are required to maintain a fire prevention program.

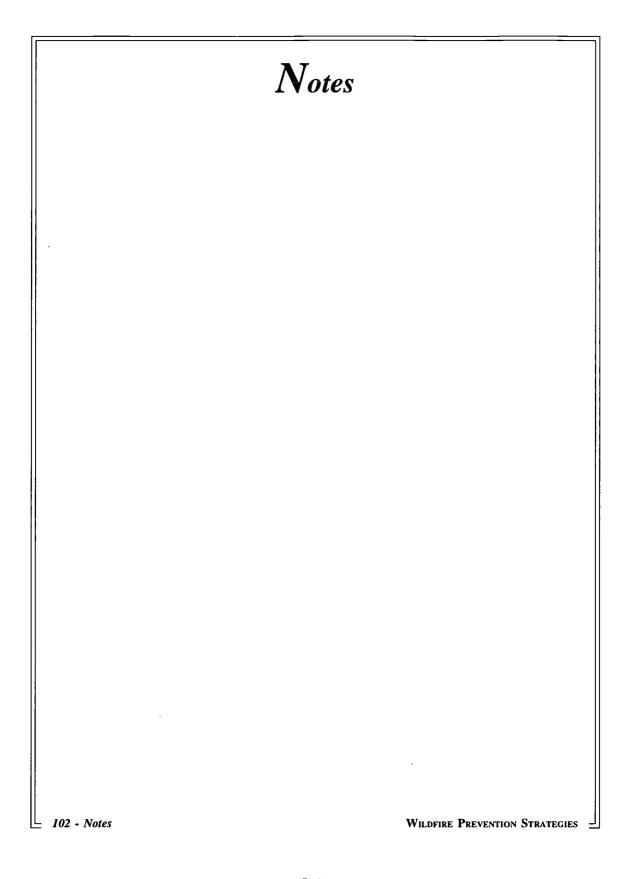
# A. Fire Prevention Planning

- 1. Maintain an updated wildfire prevention plan.
- 2. Maintain appropriate fire cause information and atlas.
- 3. Participate in wildfire prevention committees.
- 4. Train for non-fire personnel.

WILDFIRE PREVENTION STRATEGIES

Railroad Prevention Strategy - 101







# JUVENILES Prevention Strategy

8.8

Related Causes: Recurrent, Fireworks, Ignition Devices (Play with Matches), Other-Known/Unknown

08

#### I. EDUCATION

Those activities that are aimed at changing people's behavior by awareness and knowledge.

## A. Community Fire Safe

- 1. Conduct fire safety programs with homeowner's associations.
- 2. Conduct fire prevention public education programs with local service clubs.
- 3. Provide training for volunteer fire departments in public education.
- 4. Implement programs such as Neighborhood Watch, Junior Forest Ranger and Fire Safe programs.

#### B. Mass Media - Television

- 1. Prepare seasonal PSA's/interviews for local use.
- 2. Continue presenting rotating fire prevention messages on cable T.V.

#### C. Mass Media - Written/Radio

- 1. Provide local radio PSA's to appropriate stations.
- 2. Provide local written media with timely news releases.

WILDFIRE PREVENTION STRATEGIES

Juveniles Prevention Strategy - 103



- 3. Conduct children's contest to develop PSA's.
- 4. Provide local written media with timely news releases.

## D. Public Awareness Through Electronic Media (Audio Visual)

- 1. Incorporate fire prevention messages into existing and future popular audio/visual programming.
  - Pre-school (3-5 years old): Incorporate fire prevention messages into existing and future popular audio/visual programming.
  - K-6 (5-12 years old): Utilize the current hero image in transmitting the fire prevention message, i.e., movie and T.V. heroes and sports figures.

## E. Agency Printed Material

- 1. Pre-school (3-5 years): Develop the fire prevention message in updated coloring and story books.
- K-6 (5-12 years): Implement new and innovative printed material such as comic books, posters, stickers, etc.
   Consider utilization of the same themes as electronic media.
- 3. 7-12 (12-17 years): Same as K-6 but expand into teentype magazines, stickers, posters, etc.

# F. Teenage - Young Adult Fire Prevention

- 1. Develop a fire prevention program geared toward teenagers and young adults.
- 2. Participate in a fire awareness program and career day activities at local intermediate schools.

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#### G. Public Education - General

- 1. Develop an organized effort, and provide "co-op" coordination for fire education activities associated with fire prevention characters.
- 2. Conduct the following prevention programs/contacts with local schools in/or adjacent to priority areas (w/ cooperators):
  - Kid Kit for Fire Safety
  - Team teaching
  - Conduct outdoor fire safety programs (campfire safety)
  - Monitor/facilitate school fire safety curriculum
  - Develop wildfire information programs for high school/junior high school levels (i.e., school trading cards/posters)
- 3. Continue the use of Smokey and the American Cowboy as a prevention tool.
- 4. Participate in interagency education programs to maintain high visibility of the fire prevention effort.

  These are programs such as: Smokey Bear (CFFP), Smokey Sports, parades, fairs, and displays.
- 5. Develop unique fire prevention campaigns.

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- 6. Participate in educational programs to maintain high visibility of the fire prevention effort. These are programs such as:
  - Little League/soccer
  - Smokey Bear (CFFP)
  - Sports
  - Parades
  - Fairs
- 7. Consider additional school/youth educational activities with the following:
  - Environmental education 4th grade
  - Day care centers
  - Intermediate schools
  - Indian reservations
  - Boy/Girl Scouts

## H. School Programs and Team Teaching

- 1. Develop a training package (slide/tapes and guidebook) to provide uniformity to team teaching.
- 2. Update existing individualized learning kits for K-3.
- 3. Develop an elementary fire prevention education program for computer application covering grades 4-6.
- 4. Develop an intermediate fire prevention education program for computer application covering grades 7-9.
- 5. Work with the Department of Education to rebuild rapport for fire prevention programs.
- 6. Develop guides for teachers for implementing fire prevention into their classrooms.

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7. Develop a bilingual team teaching program.

#### I. Pre-School Fire Prevention

1. Develop an education kit to include visual aids, fire prevention messages, conservation messages, instructor's guide and employee's guide for presentation of materials. "Education Kit" could include 1) puppet show script and instructions; 2) development of a fire prevention game; 3) development of a coloring book to incorporate fire prevention rules.

## J. Character Appearance

1. Conduct Smokey Bear and other character appearances, programs and other uses as per Standard Guidelines.

#### K. Non-Traditional Fire Prevention: Multi-Cultural

- 1. Incorporate bilingual into school programs as appropriate.
- 2. Develop bilingual written fire prevention, such as:
  - Team teaching

#### II. ENGINEERING

Engineering is an activity designed to shield an ignition source (e.g. spark arrester) or remove the fuel which could ignite from a spark or fire brand (clearance around a home).

#### III. ENFORCEMENT

The activities used to gain compliance with fire regulations and ordinances.

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## IV. ADMINISTRATION

Those activities that are required to maintain a fire prevention program.

# A. Fire Prevention Planning

- 1. Maintain an updated wildfire prevention plan.
- 2. Maintain appropriate fire cause information and atlas.
- 3. Participate in wildfire prevention committees.
- 4. Train for non-fire personnel.

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# MISCELLANEOUS Prevention Strategy

8.9

Related Causes: Aircraft, Burning Building, Fireworks (Adult), Other-Known/Unknown 09

#### I. EDUCATION

Those activities that are aimed at changing people's behavior by awareness and knowledge.

## A. Community Fire Safe

- 1. Provide homeowner fire safety material as requested.
- 2. Conduct fire safety programs with homeowner's associations.
- 3. Conduct fire prevention public education programs with local service clubs.
- 4. Provide training for volunteer fire departments in public education.
- 5. Coordinate activities in a "Fire Awareness Time" annual campaign (spring clean-up, weed abatement program).
- 6. Coordinate activities in a "Fall Fire Safety" annual campaign (wood stoves, flue, smoke alarms).

#### B. Mass Media - Television

- 1. Prepare seasonal PSA's/interviews for local use.
- 2. Coordinate efforts with fire prevention cooperators to develop television public service announcements.

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- 3. Monitor and facilitate the national CFFP/AD Council program with local stations.
- 4. Utilize effective fire information procedures/systems during incidents while stressing the importance of increased fire prevention efforts.
- 5. Conduct afternoon local T.V. talk shows.

#### C. Mass Media - Written/Radio

- 1. Provide local radio PSA's to appropriate stations.
- 2. Provide local written media with timely news releases.
- 3. Develop a schedule of fire prevention activities/events/ seasons and prepare news releases to be used on a scheduled basis.
- 4. Provide local written media with timely news releases.
- 5. Provide the written media with annual CFFP/AD Council packages/kit.

#### D. Mass Media - General

- 1. Public Meetings Participate with city councils, county commissioners to proclaim Fire Prevention Week
- 2. Develop a system to incorporate roadside billboard signing in selected areas.

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## E. Signing

- 1. Develop and update annually a fire prevention sign plan that describes:
  - Sign locations (highway, roadside, etc.)
  - Sign standards (size, configuration)
  - Types of messages (seasonally)
  - Maintenance responsibility
  - Procurement procedures
- 2. Install fire prevention signing at points of significant interest.
- 3. Implement a highway rest stop fire prevention signing program.
- 4. Implement a highway rest area/visitor information center fire prevention display program.
- 5. Repair and maintain existing signs.
- 6. Design and produce cause specific signing.

# F. Fire Prevention High Visibility Public Contact

- 1. Establish engine patrol routes and implement on a needed basis, i.e., holidays, high use periods and weekends.
- 2. Implement high visibility fire prevention efforts in the following areas:
  - Fire prevention patrol
  - Visitor center fire prevention
  - Organizational militia approach to fire prevention

WILDFIRE PREVENTION STRATEGIES

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## G. Agency Printed Material

- 1. Evaluate all printed material (brochures, flyers, etc.) to determine if adequate fire prevention considerations are being displayed.
- 2. Inventory, plan, and evaluate future publication needs and develop a timeline for completion.
- 3. Develop publication standards and guidelines, and control procedures for future publications or revised publications.

#### H. Public Education - General

- 1. Participate in educational programs to maintain high visibility of the fire prevention effort. These are programs such as:
  - Parades
  - Fairs
  - Displays
  - Service clubs
- 2. Consider other fire prevention activities, such as:
  - Fire Prevention Week mall display
  - Recreation & boat show
  - Provide fire prevention information at public
  - Conventions of conservation type groups
  - Hunter safety booth

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- 3. Conduct outdoor fire safety programs, such as:
  - Campground talks
  - Hunter stations
  - Visitor centers
  - Check stations

Reception areas

#### II. ENGINEERING

Engineering is an activity designed to shield an ignition source (e.g. spark arrester) or remove the fuel which could ignite from a spark or fire brand (clearance around a home).

#### A. Hazard Reduction

- 1. Develop an area hazard reduction program to address dispersed and developed recreation sites, hunter camps, turnouts, and places of concentrated public use and population zones.
- 2. Inventory undeveloped sites and hazard areas, and complete necessary hazard reduction.
- 3. Contact highway/road departments to complete/ coordinate highway reduction projects. Meet with all appropriate agencies (pre-season) to prioritize projects.

## B. Spark Arresters

1. Conduct inspections on all internal combustion equipment on timber sale activities.

WILDFIRE PREVENTION STRATEGIES

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## C. Campfire Safety

- 1. Implement a campfire safety program, such as:
  - Campfire safety handouts
  - Stake campfire rings at dispersed sites.

#### III. ENFORCEMENT

The activities used to gain compliance with fire regulations and ordinances.

## A. Fire Investigation

1. Continue a fire investigation program to provide adequate fire cause determination.

#### B. Public Use Restrictions / Closures

1. Revise and issue Public Use Restriction/Closure Orders/plan as needed.

## C. Spark Arresters

1. Authorized personnel will inspect equipment and offhighway vehicles for legal spark arresters routinely, in applicable areas.

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#### IV. ADMINISTRATION

Those activities that are required to maintain a fire prevention program.

## A. Early Warning

- 1. High fire danger conditions which include, but are not limited to, the following, will require additional strategies:
  - Spring/fall seasons
  - Low fuel moisture
  - Extreme burning index
  - Dry lightning
  - Depleted initial attack capabilities (resource drawdown)
  - Going fires
  - Red flag weather conditions
- 2. The above indicators will require consideration of the following measures:
  - Additional staffing
  - Pre-positioning of resources
  - Increased detection
  - Patrols
  - Media applications
- 3. Improve fire reporting to provide a more accurate fire cause.

WILDFIRE PREVENTION STRATEGIES

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# B. Fire Prevention Planning

- 1. Maintain an updated wildfire prevention plan.
- 2. Maintain appropriate fire cause information and atlas.
- 3. Participate in wildfire prevention committees.
- 4. Train for non-fire personnel.

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# **P**revention Program Evaluation

9.0

Wildland fire prevention programs should be evaluated regularly to maintain their effectiveness and efficiency. The following information and questions are provided to assist with the development and evaluation of a prevention program.

#### **PREVENTION ACTIVITY EVALUATION**

Prevention activities will not be effective unless they are completed as scheduled. A prevention activity evaluation, done annually or more often, should determine if the prevention activities/actions are being successfully completed as planned.

Have the prevention activities been completed as scheduled? If not, why? Was funding reduced? Were there performance problems by specific individuals? If so, who and why?

#### PREVENTION STRATEGY EVALUATION

The prevention strategies cannot be expected to be effective unless all their component prevention activities are implemented. An evaluation of the prevention strategies, done every three to five years, should determine if the selected strategies are effectively reducing costs and losses from wildland fire.

Are the prevention strategies reducing the costs of fire suppression and damages caused by wildland fires within the unit? If not, have the targeted fire causes changed or moved to other areas? If not, the prevention strategies may need to be reevaluated and/or redefined to more effectively affect the priority prevention area(s) and user group(s).

WILDFIRE PREVENTION STRATEGIES

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